






Report Generated by Test Manager

Title: MPC-L - Test 0.005
Author: Gianvincenzo Daddabbo, Gaetano Gallo, Alberto Ruggeri, Martina Tedesco, Alessandro Toschi
Date: 22-Jun-2021 21:55:35

Test Environment

Platform: PCWIN64
MATLAB: (R2019b)

Summary

Name	Outcome	Duration (Seconds)
Results: 2021-Jun-22 21:40:41	4✖	804.86
 MPC_L Setup1	4✖	804.86
 Iteration4	✖	213.7
 Iteration8	✖	176.246
 Iteration9	✖	157.347
 Iteration11	✖	257.231

Results: 2021-Jun-22 21:40:41

Result Type: Result Set
Parent: None
Start Time: 22-Jun-2021 21:40:42
End Time: 22-Jun-2021 21:54:07
Outcome: Total: 4, **Failed: 4**

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MPC_L Setup1

Test Result Information

Result Type: Test Case Result
Parent: [Results: 2021-Jun-22 21:40:41](#)
Start Time: 22-Jun-2021 21:40:42
End Time: 22-Jun-2021 21:54:07
Outcome: **Failed**
Cause of Failure: **Test failed as iteration failed**
Description:

This test is aimed to try to find a feasible and stable configuration for the MPC when it comes to slow speed scenarios

Test Case Information

Name: MPC_L Setup1
Type: Baseline Test

Iteration4

Test Result Information

Result Type: Test Iteration Result
Parent: [MPC_L Setup1](#)
Start Time: 22-Jun-2021 21:40:42
End Time: 22-Jun-2021 21:44:15
Outcome: **Failed**
Cause of Failure: **Failed criteria: Verification**

Test Case Information

Name: Iteration4
Type: Baseline Test

Iteration Settings

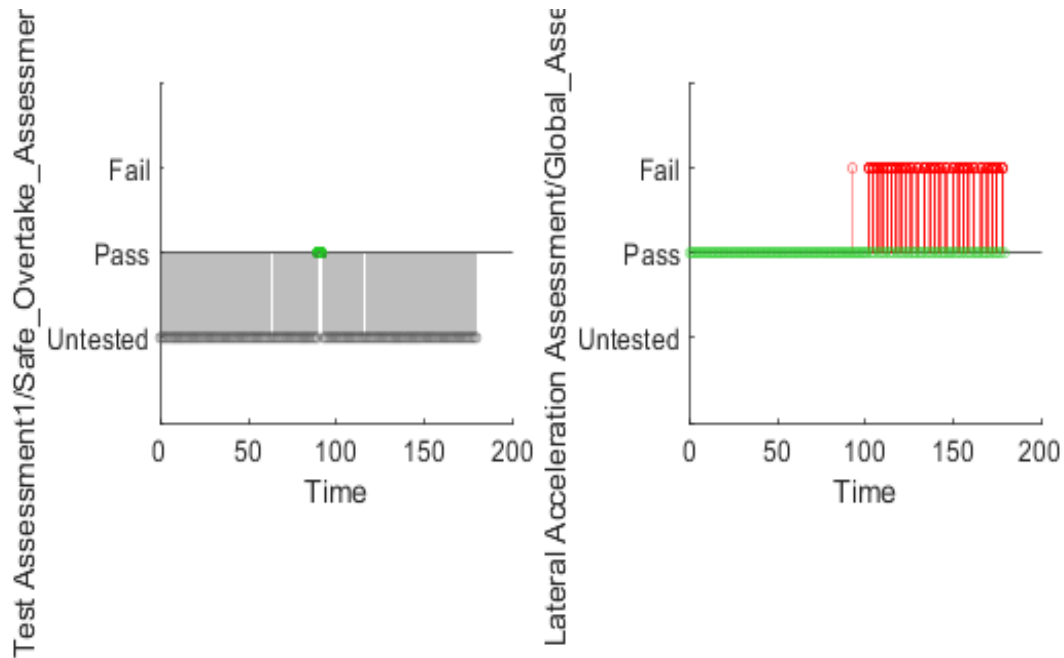
Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 4

Verify Result

Name		Link to Plot
✓	Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)	Link
✗	Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)	Link

Name	
✓	Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)
✗	Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)



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Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance_L
Simulation Mode: normal
Override SIL or PIL Mod 0
e:
Configuration Set: Configuration
Start Time: 0
Stop Time: 180
Checksum: 3638996573 2838091224 377093571 4054291458

Simulink Version: 10.0
 Model Version: 1.7
 Model Author: alber
 Date: Tue Jun 22 20:37:50 2021
 User ID: alber
 Model Path: D:\Documenti\GitHub\dynamic-obstacle-avoidance\Code\MPC_L\Dynamic_obstacle_avoidance_L.slx
 Machine Name: LAPTOP-OGD8JCHC
 Solver Name: ode45
 Solver Type: Variable-Step
 Max Step Size: 0.001
 Simulation Start Time: 2021-06-22 21:40:52
 Simulation Stop Time: 2021-06-22 21:44:13
 Platform: PCWIN64

Parameter Overrides

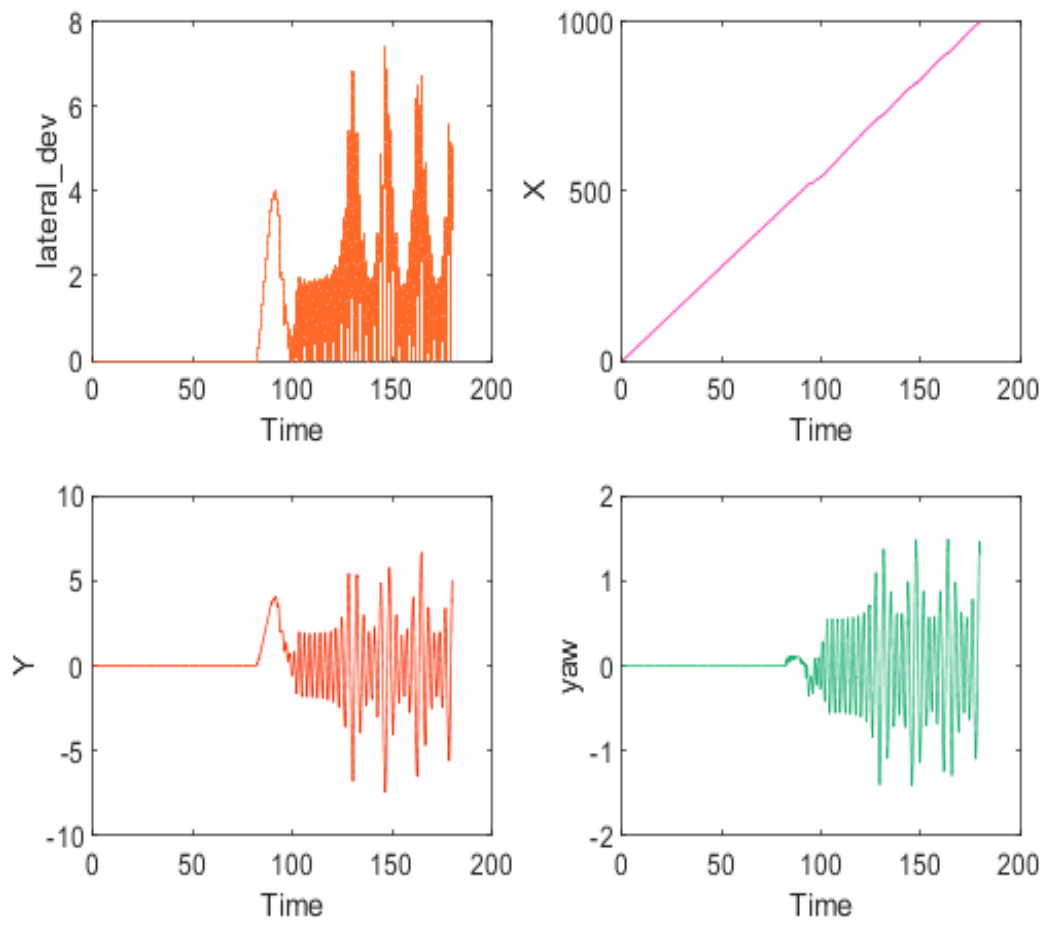
Workspace Variable	Value	Source	Model Element
Parameter Set 4			
Ts	0.005	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/ , Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/MATLAB Function, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/Sampling/Counter Free-Running1, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/To Workspace2, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace1, Dynamic_obstacle_avoidance_

			L/Subsystem/Data to Workspace/To Workspace4, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace5, Dynamic_obstacle_avoidance_L/Subsystem/Dynamic Model/C_r, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/Constant5, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/MATLAB Function1, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/ , Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/Plant Model Generator, Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Counter Free-Running, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/MATLAB Function
WOV	[30 30 8 30]	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant
p	10	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Selector, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant1

Simulation Output

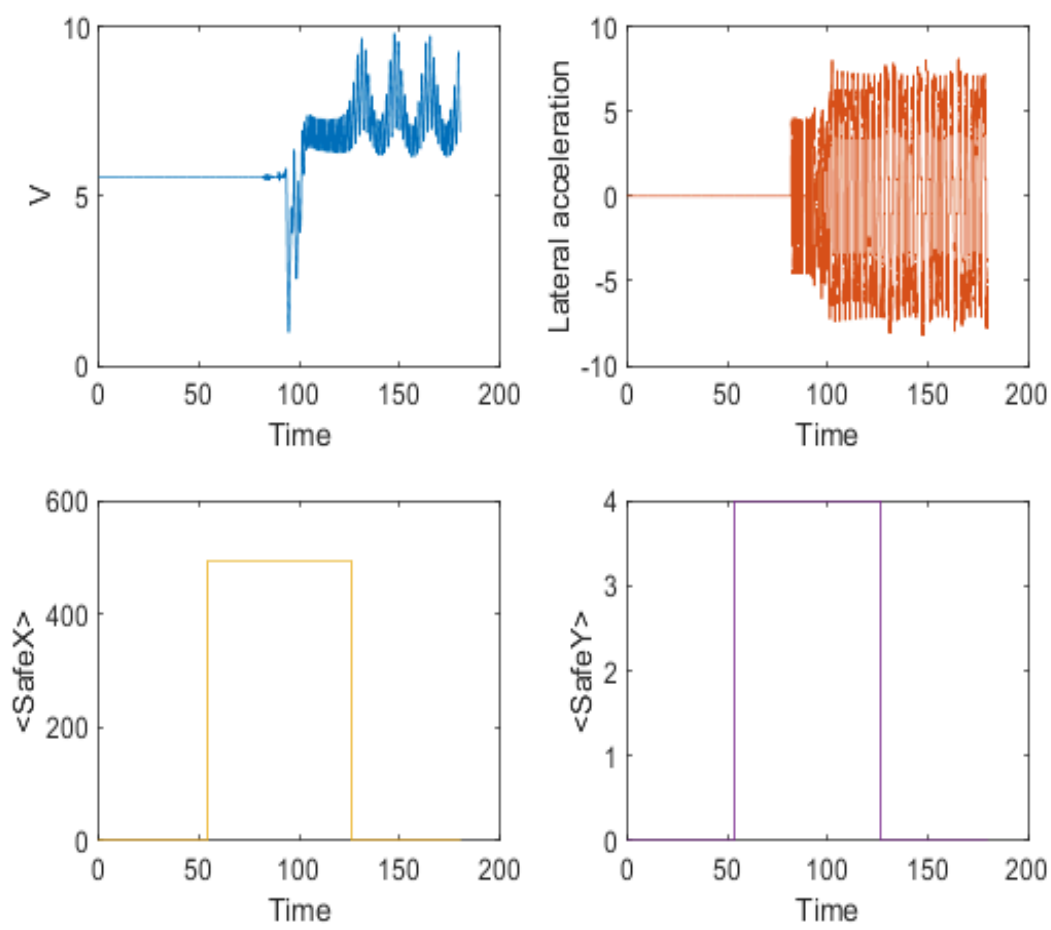
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
lateral_dev	double		0.005	zoh	union	Link
X	double		Continuous	linear	union	Link
Y	double		Continuous	linear	union	Link
yaw	double		Continuous	linear	union	Link
V	double		Continuous	linear	union	Link
Lateral acceleration	double		Continuous	linear	union	Link
<SafeX>	double		0.005	zoh	union	Link
<SafeY>	double		0.005	zoh	union	Link
<EndX>	double		0.005	zoh	union	Link
<EndY>	double		0.005	zoh	union	Link
<DetPoint>(1,1)	double		0.005	zoh	union	Link
<EntryPoint>(1,1)	double		0.005	zoh	union	Link
<DetPoint>(1,2)	double		0.005	zoh	union	Link
<DetPoint>(1,3)	double		0.005	zoh	union	Link
<DetPoint>(1,4)	double		0.005	zoh	union	Link
<EntryPoint>(1,2)	double		0.005	zoh	union	Link
<EntryPoint>(1,3)	double		0.005	zoh	union	Link
<EntryPoint>(1,4)	double		0.005	zoh	union	Link

Name	Data Type	Units	Sample Time	Interp	Sync
lateral_dev	double		0.005	zoh	union
X	double		Continuous	linear	union
Y	double		Continuous	linear	union
yaw	double		Continuous	linear	union



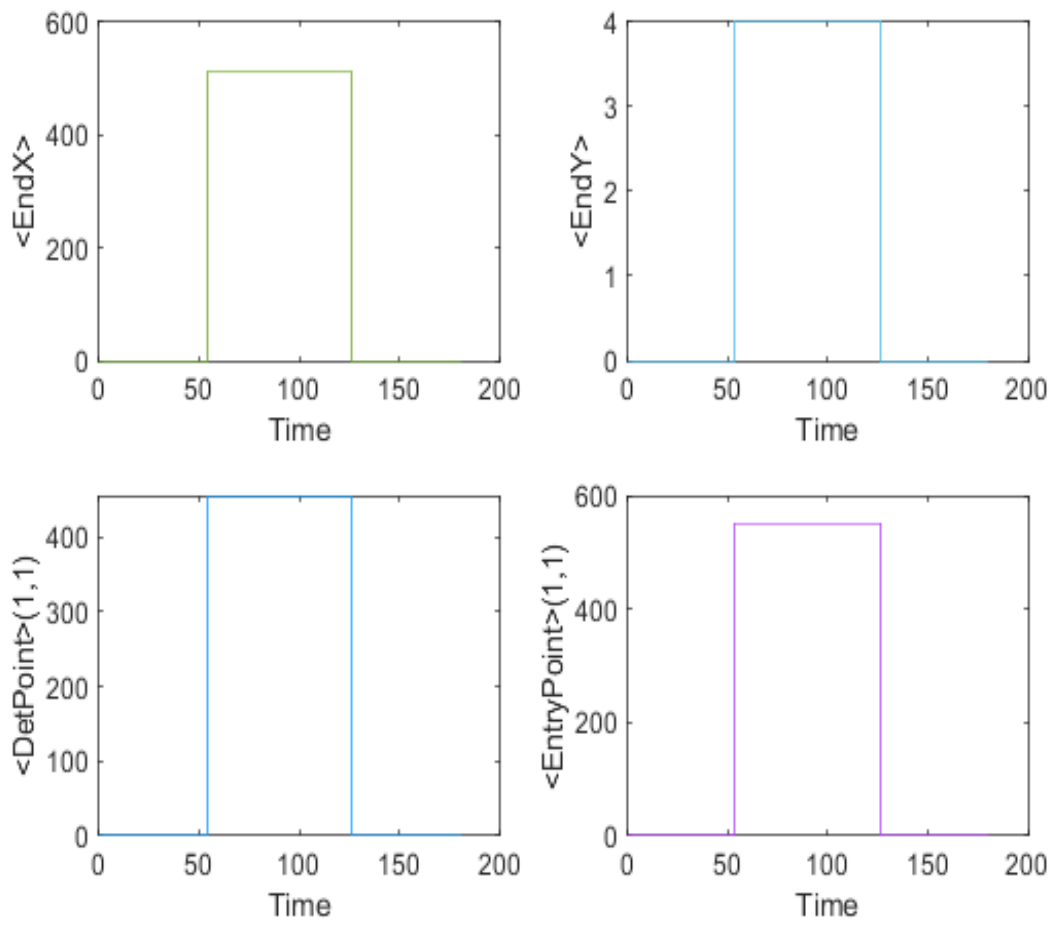
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Name	Data Type	Units	Sample Time	Interp	Sync
V	double		Continuous	linear	union
Lateral acceleration	double		Continuous	linear	union
<SafeX>	double		0.005	zoh	union
<SafeY>	double		0.005	zoh	union



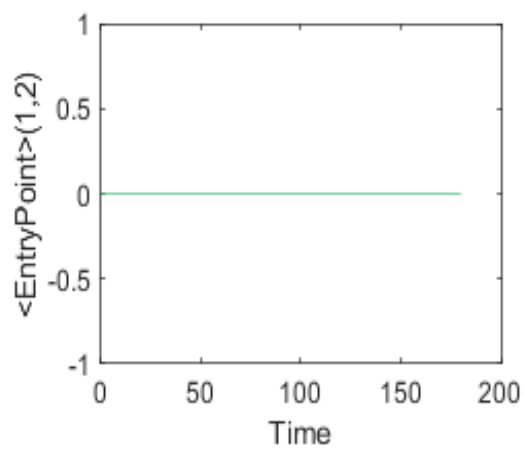
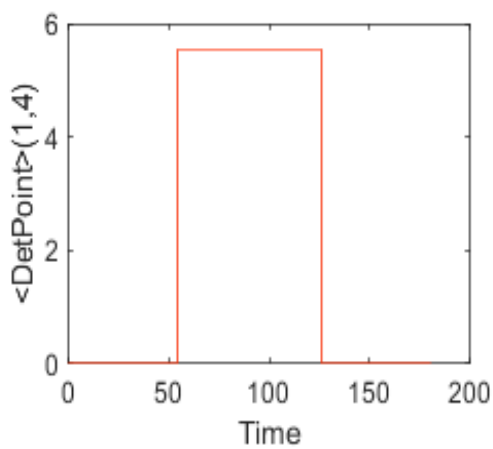
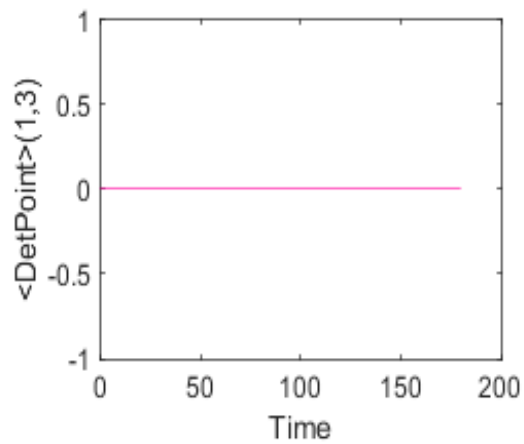
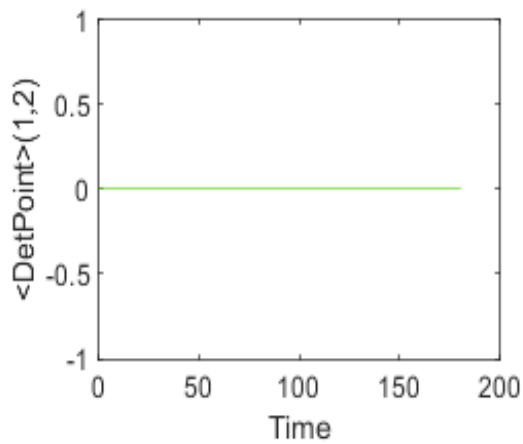
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Name	Data Type	Units	Sample Time	Interp	Sync
<EndX>	double		0.005	zoh	union
<EndY>	double		0.005	zoh	union
<DetPoint>(1,1)	double		0.005	zoh	union
<EntryPoint>(1,1)	double		0.005	zoh	union



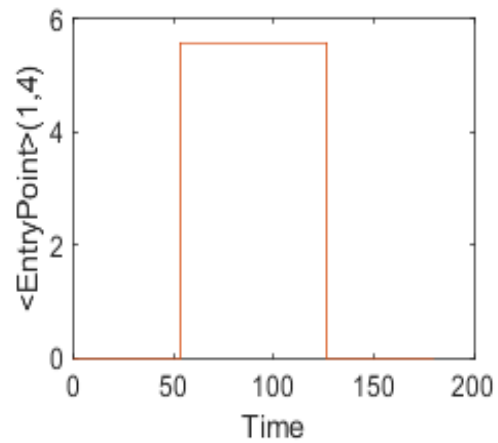
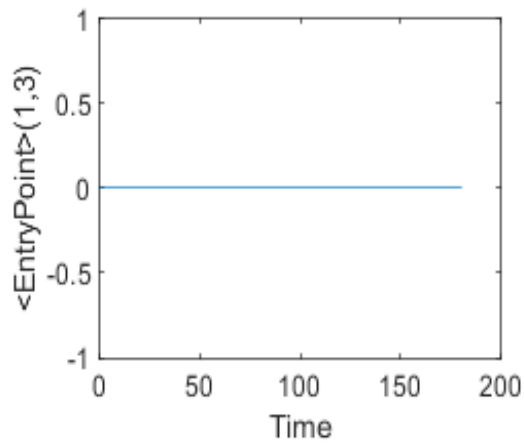
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Name	Data Type	Units	Sample Time	Interp	Sync
<DetPoint>(1,2)	double		0.005	zoh	union
<DetPoint>(1,3)	double		0.005	zoh	union
<DetPoint>(1,4)	double		0.005	zoh	union
<EntryPoint>(1,2)	double		0.005	zoh	union



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Name	Data Type	Units	Sample Time	Interp	Sync
<EntryPoint>(1,3)	double		0.005	zoh	union
<EntryPoint>(1,4)	double		0.005	zoh	union



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Iteration8

Test Result Information

Result Type: Test Iteration Result
 Parent: [MPC L Setup1](#)
 Start Time: 22-Jun-2021 21:44:16

End Time: 22-Jun-2021 21:47:12
Outcome: **Failed**
Cause of Failure: **Failed criteria: Verification**

Test Case Information

Name: Iteration8
Type: Baseline Test

Iteration Settings

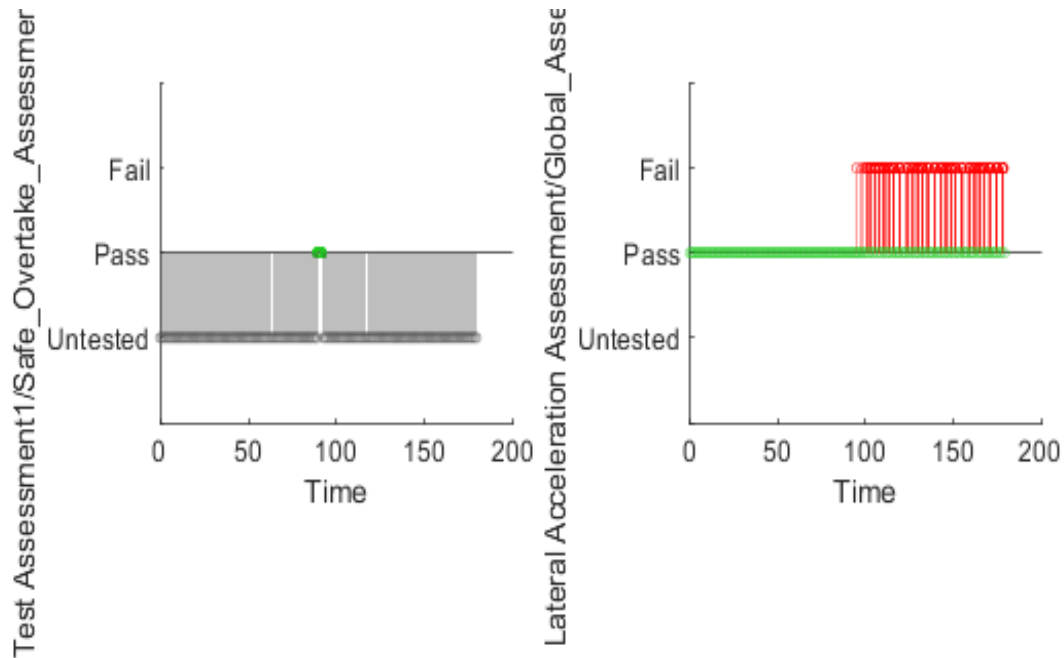
Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 8

Verify Result

Name	Link to Plot
✓ Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)	Link
✗ Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)	Link

Name
✓ Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)
✗ Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)



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Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance_L
Simulation Mode: normal
Override SIL or PIL Mod 0
e:
Configuration Set: Configuration
Start Time: 0
Stop Time: 180
Checksum: 1193630085 2076334449 1185045209 261813145

Simulink Version: 10.0
 Model Version: 1.7
 Model Author: alber
 Date: Tue Jun 22 20:37:50 2021
 User ID: alber
 Model Path: D:\Documenti\GitHub\dynamic-obstacle-avoidance\Code\MPC_L\Dynamic_obstacle_avoidance_L.slx
 Machine Name: LAPTOP-OGD8JCHC
 Solver Name: ode45
 Solver Type: Variable-Step
 Max Step Size: 0.001
 Simulation Start Time: 2021-06-22 21:44:16
 Simulation Stop Time: 2021-06-22 21:47:11
 Platform: PCWIN64

Parameter Overrides

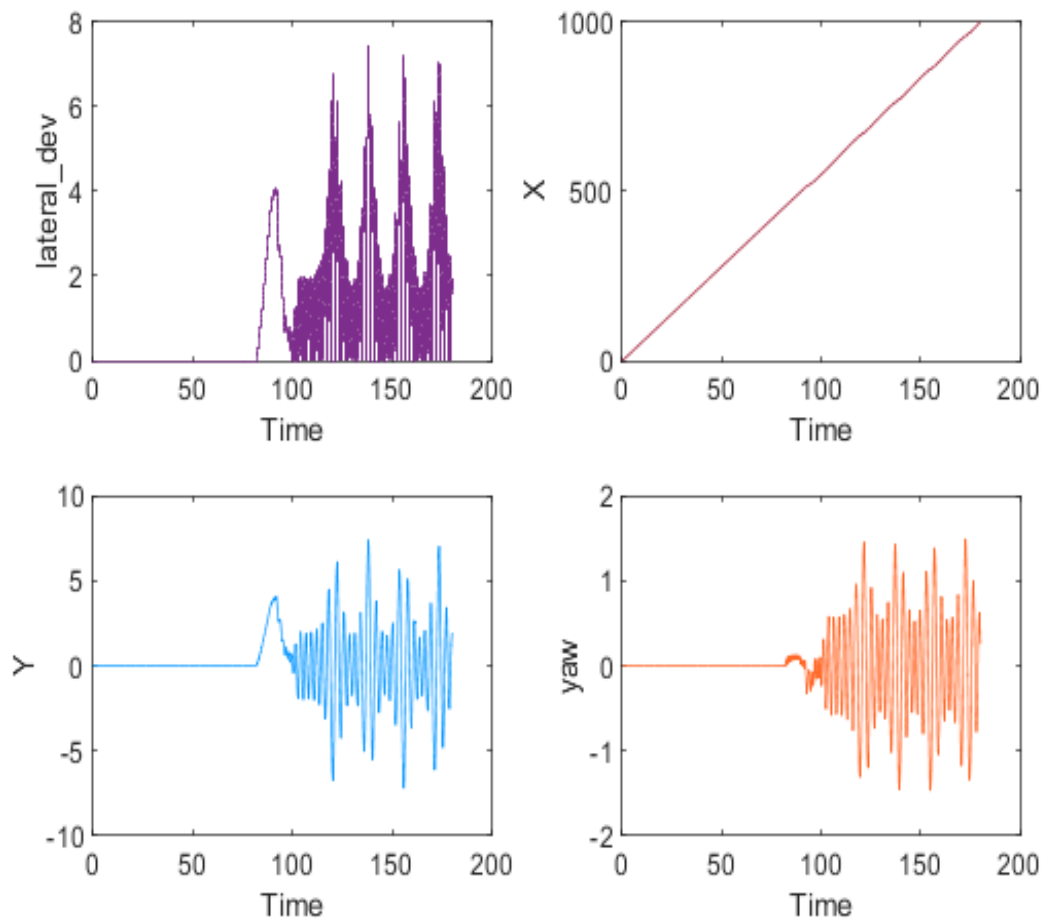
Workspace Variable	Value	Source	Model Element
Parameter Set 8			
Ts	0.005	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/ , Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/MATLAB Function, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/Sampling/Counter Free-Running1, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/To Workspace2, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace1, Dynamic_obstacle_avoidance_

			L/Subsystem/Data to Workspace/To Workspace4, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace5, Dynamic_obstacle_avoidance_L/Subsystem/Dynamic Model/C_r, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/Constant5, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/MATLAB Function1, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/ , Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/Plant Model Generator, Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Counter Free-Running, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/MATLAB Function
WOV	[30 30 8 30]	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant
p	8	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Selector, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant1

Simulation Output

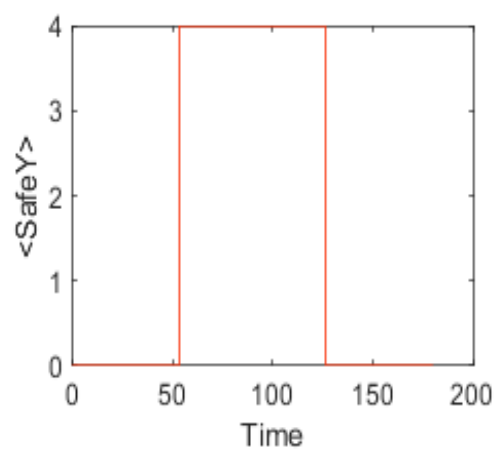
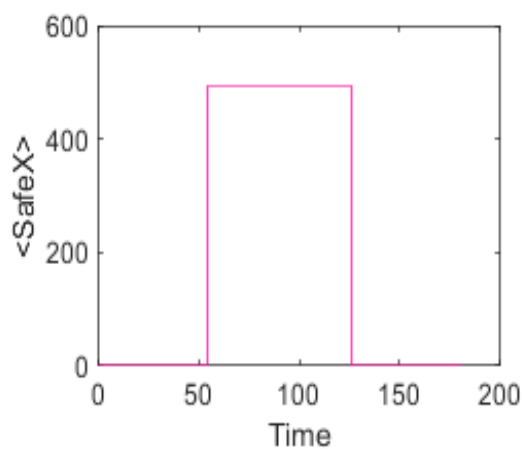
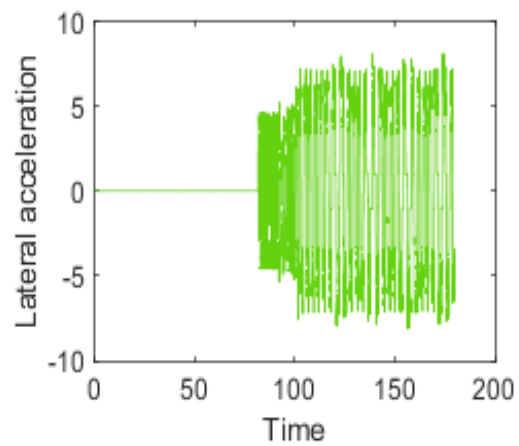
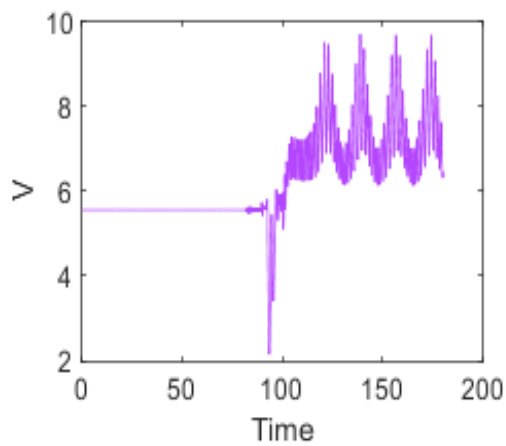
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
lateral_dev	double		0.005	zoh	union	Link
X	double		Continuous	linear	union	Link
Y	double		Continuous	linear	union	Link
yaw	double		Continuous	linear	union	Link
V	double		Continuous	linear	union	Link
Lateral acceleration	double		Continuous	linear	union	Link
<SafeX>	double		0.005	zoh	union	Link
<SafeY>	double		0.005	zoh	union	Link
<EndX>	double		0.005	zoh	union	Link
<EndY>	double		0.005	zoh	union	Link
<DetPoint>(1,1)	double		0.005	zoh	union	Link
<EntryPoint>(1,1)	double		0.005	zoh	union	Link
<DetPoint>(1,2)	double		0.005	zoh	union	Link
<DetPoint>(1,3)	double		0.005	zoh	union	Link
<DetPoint>(1,4)	double		0.005	zoh	union	Link
<EntryPoint>(1,2)	double		0.005	zoh	union	Link
<EntryPoint>(1,3)	double		0.005	zoh	union	Link
<EntryPoint>(1,4)	double		0.005	zoh	union	Link

Name	Data Type	Units	Sample Time	Interp	Sync
lateral_dev	double		0.005	zoh	union
X	double		Continuous	linear	union
Y	double		Continuous	linear	union
yaw	double		Continuous	linear	union



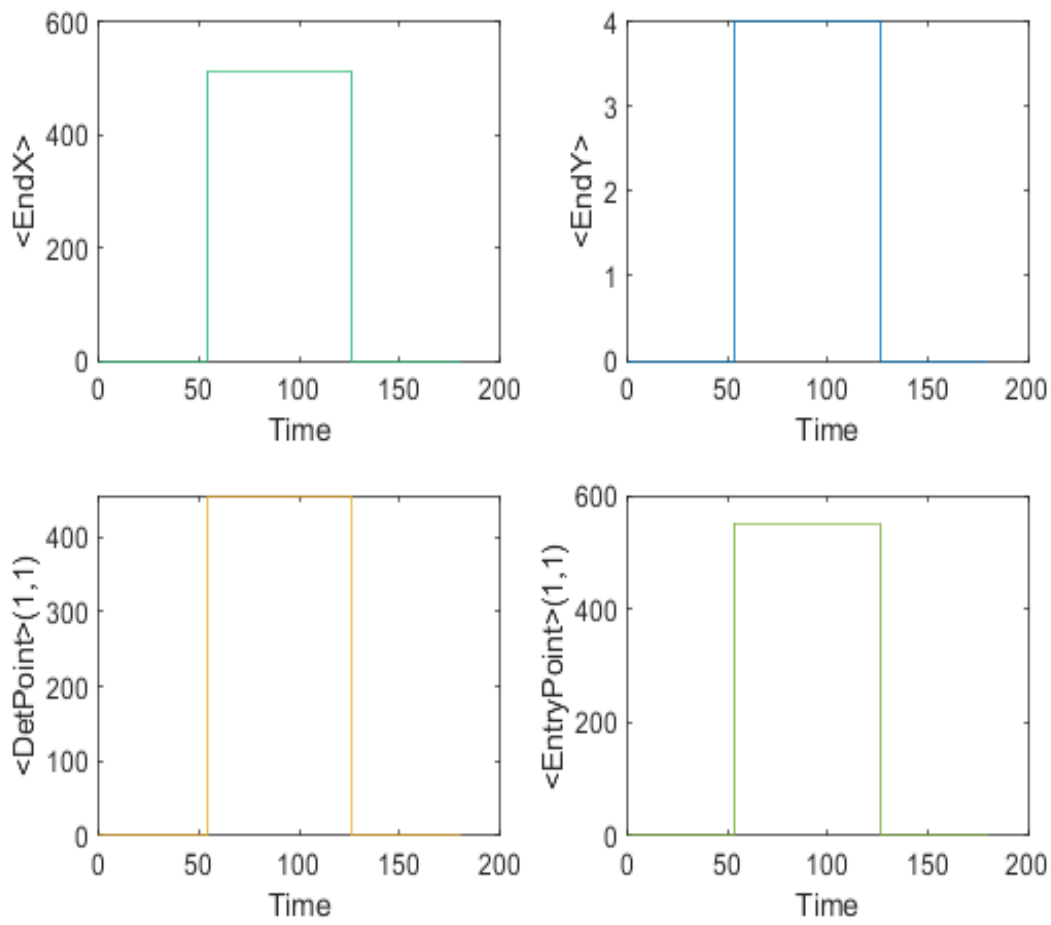
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Name	Data Type	Units	Sample Time	Interp	Sync
V	double		Continuous	linear	union
Lateral acceleration	double		Continuous	linear	union
<SafeX>	double		0.005	zoh	union
<SafeY>	double		0.005	zoh	union



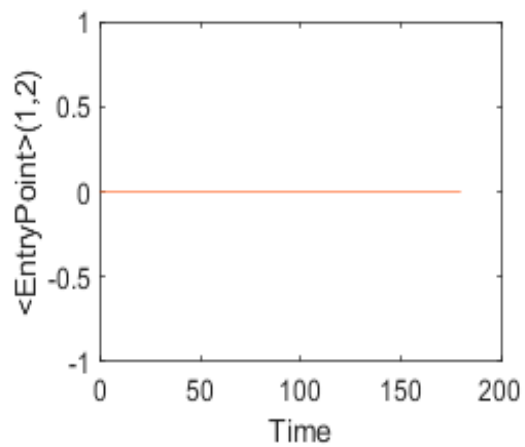
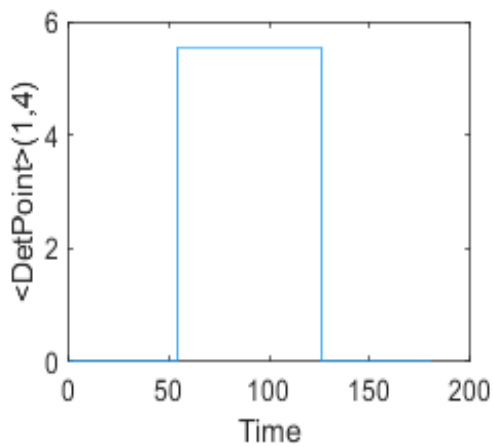
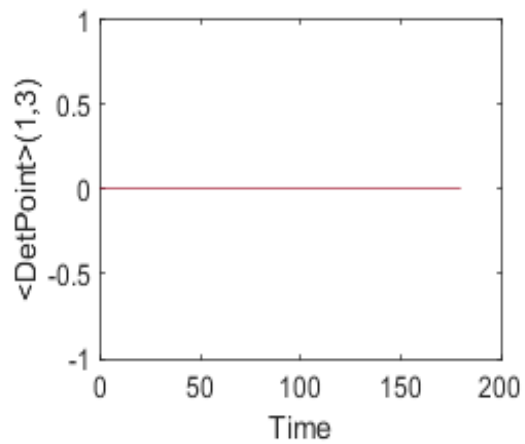
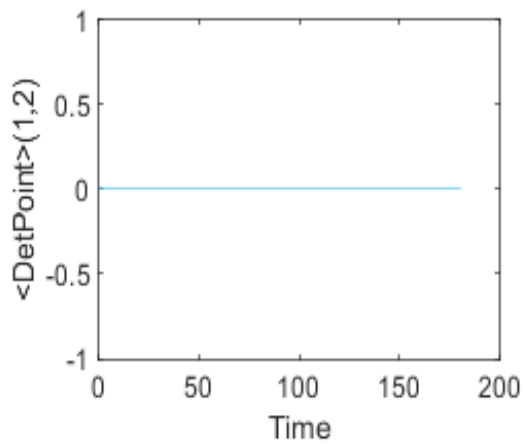
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Name	Data Type	Units	Sample Time	Interp	Sync
<EndX>	double		0.005	zoh	union
<EndY>	double		0.005	zoh	union
<DetPoint>(1,1)	double		0.005	zoh	union
<EntryPoint>(1,1)	double		0.005	zoh	union



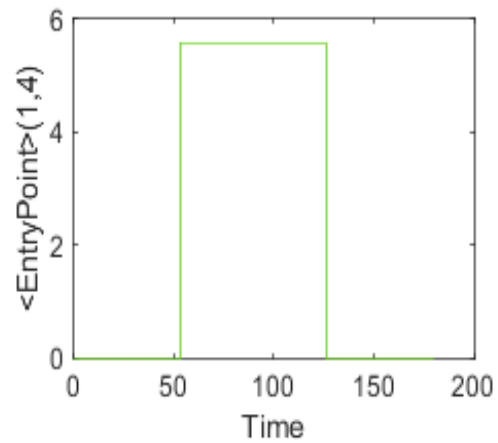
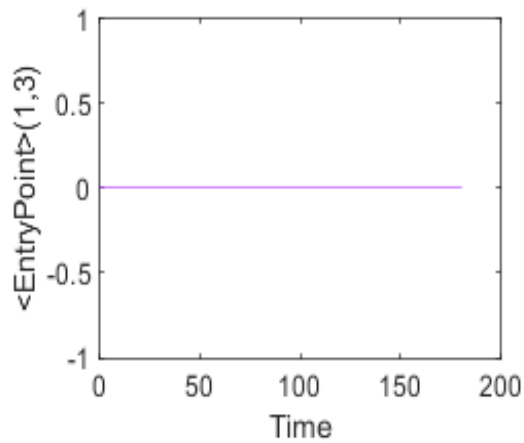
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Name	Data Type	Units	Sample Time	Interp	Sync
<DetPoint>(1,2)	double		0.005	zoh	union
<DetPoint>(1,3)	double		0.005	zoh	union
<DetPoint>(1,4)	double		0.005	zoh	union
<EntryPoint>(1,2)	double		0.005	zoh	union



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Name	Data Type	Units	Sample Time	Interp	Sync
<EntryPoint>(1,3)	double		0.005	zoh	union
<EntryPoint>(1,4)	double		0.005	zoh	union



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Iteration9

Test Result Information

Result Type: Test Iteration Result
Parent: [MPC L Setup1](#)
Start Time: 22-Jun-2021 21:47:12

End Time: 22-Jun-2021 21:49:49
Outcome: **Failed**
Cause of Failure: **Failed criteria: Verification**

Test Case Information

Name: Iteration9
Type: Baseline Test

Iteration Settings

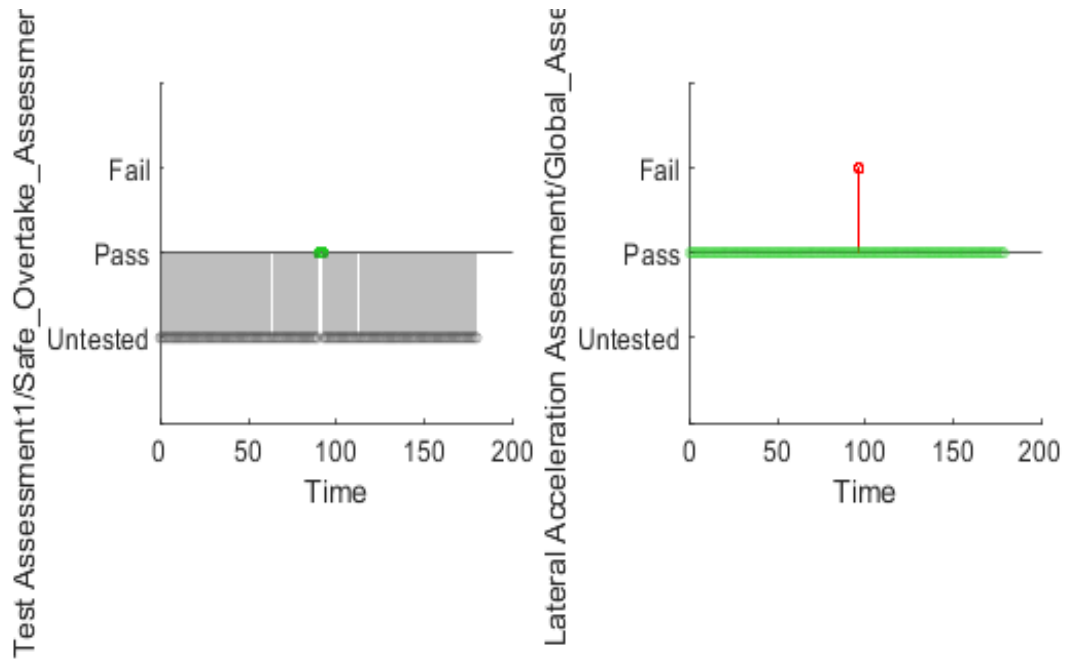
Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 9

Verify Result

Name	Link to Plot
✓ Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)	Link
✗ Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)	Link

Name
✓ Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)
✗ Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)



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Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance_L
Simulation Mode: normal
Override SIL or PIL Mod 0
e:
Configuration Set: Configuration
Start Time: 0
Stop Time: 180
Checksum: 1193630085 2076334449 1185045209 261813145

Simulink Version: 10.0
 Model Version: 1.7
 Model Author: alber
 Date: Tue Jun 22 20:37:50 2021
 User ID: alber
 Model Path: D:\Documenti\GitHub\dynamic-obstacle-avoidance\Code\MPC_L\Dynamic_obstacle_avoidance_L.slx
 Machine Name: LAPTOP-OGD8JCHC
 Solver Name: ode45
 Solver Type: Variable-Step
 Max Step Size: 0.001
 Simulation Start Time: 2021-06-22 21:47:12
 Simulation Stop Time: 2021-06-22 21:49:48
 Platform: PCWIN64

Parameter Overrides

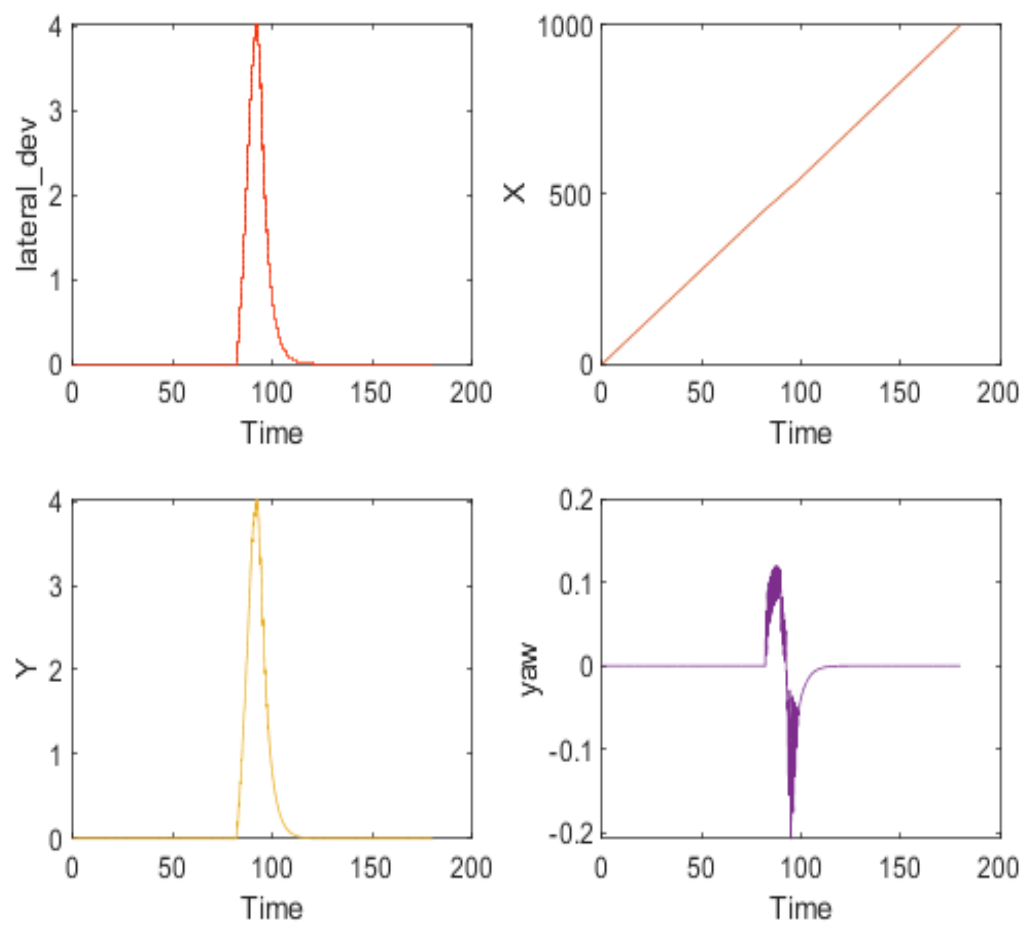
Workspace Variable	Value	Source	Model Element
Parameter Set 9			
Ts	0.005	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/ , Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/MATLAB Function, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/Sampling/Counter Free-Running1, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/To Workspace2, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace1, Dynamic_obstacle_avoidance_

			L/Subsystem/Data to Workspace/To Workspace4, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace5, Dynamic_obstacle_avoidance_L/Subsystem/Dynamic Model/C_r, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/Constant5, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/MATLAB Function1, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/ , Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/Plant Model Generator, Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Counter Free-Running, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/MATLAB Function
WOV	[10 10 10 10]	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant
p	8	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Selector, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant1

Simulation Output

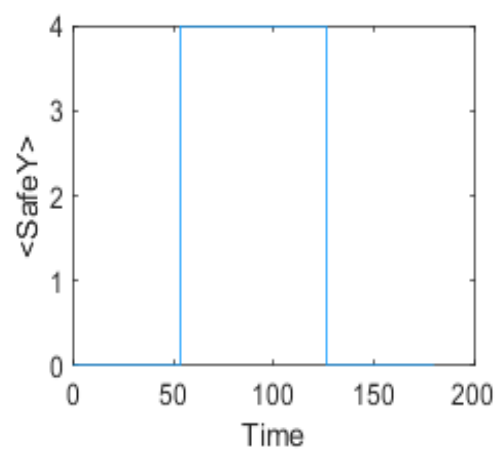
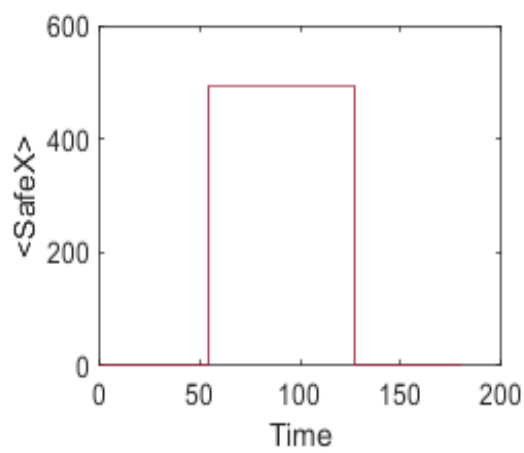
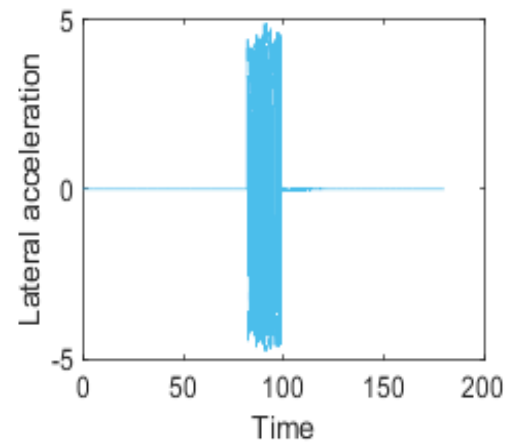
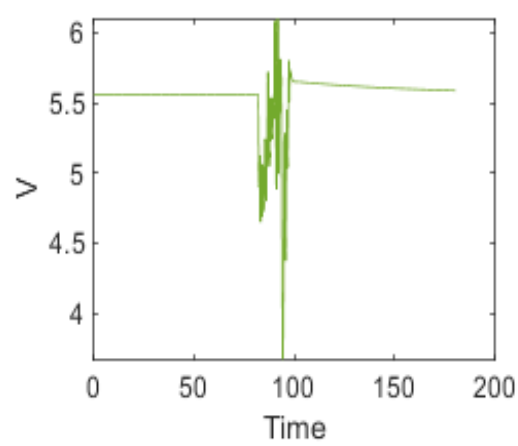
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
lateral_dev	double		0.005	zoh	union	Link
X	double		Continuous	linear	union	Link
Y	double		Continuous	linear	union	Link
yaw	double		Continuous	linear	union	Link
V	double		Continuous	linear	union	Link
Lateral acceleration	double		Continuous	linear	union	Link
<SafeX>	double		0.005	zoh	union	Link
<SafeY>	double		0.005	zoh	union	Link
<EndX>	double		0.005	zoh	union	Link
<EndY>	double		0.005	zoh	union	Link
<DetPoint>(1,1)	double		0.005	zoh	union	Link
<EntryPoint>(1,1)	double		0.005	zoh	union	Link
<DetPoint>(1,2)	double		0.005	zoh	union	Link
<DetPoint>(1,3)	double		0.005	zoh	union	Link
<DetPoint>(1,4)	double		0.005	zoh	union	Link
<EntryPoint>(1,2)	double		0.005	zoh	union	Link
<EntryPoint>(1,3)	double		0.005	zoh	union	Link
<EntryPoint>(1,4)	double		0.005	zoh	union	Link

Name	Data Type	Units	Sample Time	Interp	Sync
lateral_dev	double		0.005	zoh	union
X	double		Continuous	linear	union
Y	double		Continuous	linear	union
yaw	double		Continuous	linear	union



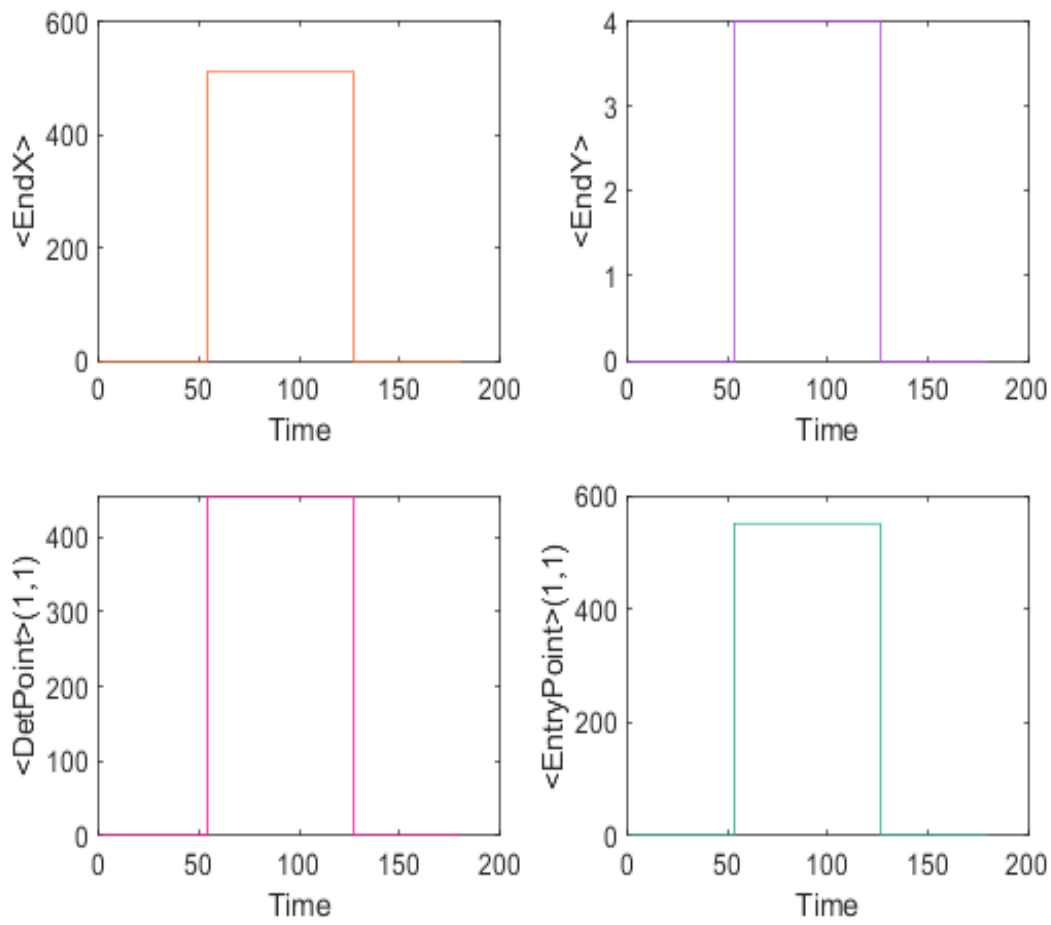
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Name	Data Type	Units	Sample Time	Interp	Sync
V	double		Continuous	linear	union
Lateral acceleration	double		Continuous	linear	union
<SafeX>	double		0.005	zoh	union
<SafeY>	double		0.005	zoh	union



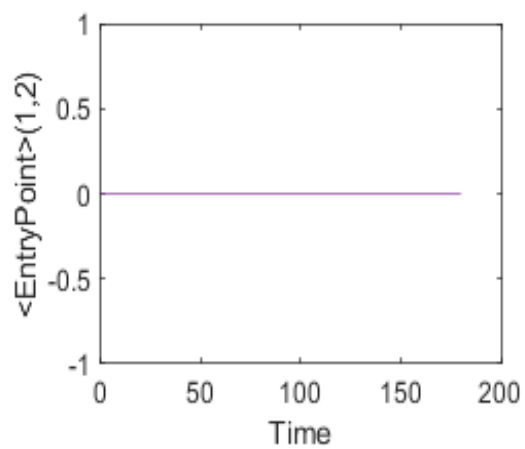
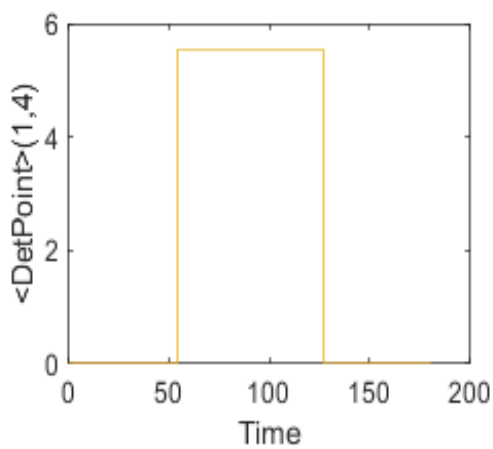
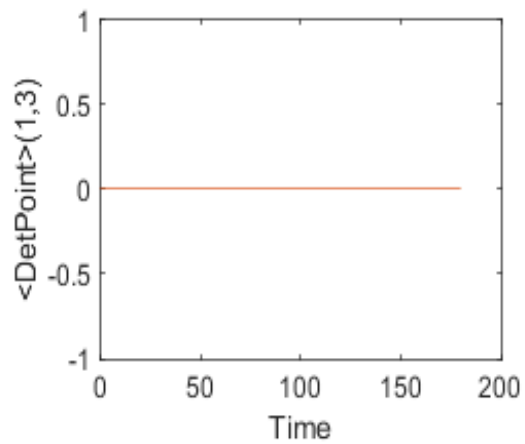
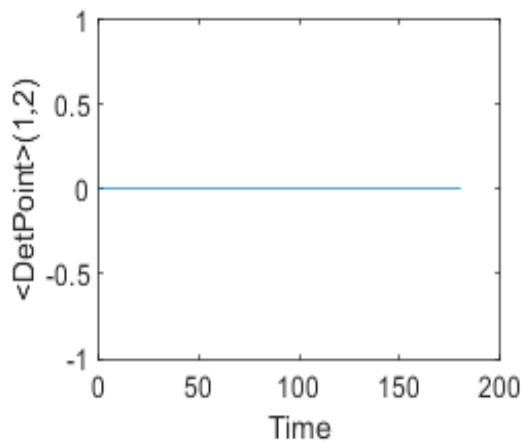
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Name	Data Type	Units	Sample Time	Interp	Sync
<EndX>	double		0.005	zoh	union
<EndY>	double		0.005	zoh	union
<DetPoint>(1,1)	double		0.005	zoh	union
<EntryPoint>(1,1)	double		0.005	zoh	union



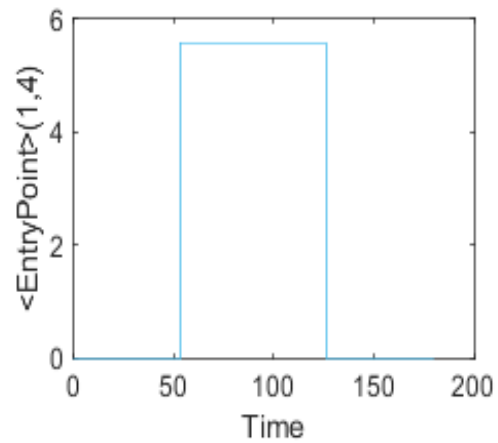
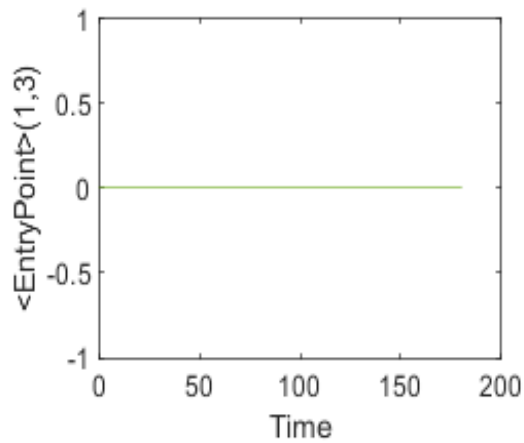
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Name	Data Type	Units	Sample Time	Interp	Sync
<DetPoint>(1,2)	double		0.005	zoh	union
<DetPoint>(1,3)	double		0.005	zoh	union
<DetPoint>(1,4)	double		0.005	zoh	union
<EntryPoint>(1,2)	double		0.005	zoh	union



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Name	Data Type	Units	Sample Time	Interp	Sync
<EntryPoint>(1,3)	double		0.005	zoh	union
<EntryPoint>(1,4)	double		0.005	zoh	union



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Iteration11

Test Result Information

Result Type: Test Iteration Result
Parent: [MPC L Setup1](#)
Start Time: 22-Jun-2021 21:49:49

End Time: 22-Jun-2021 21:54:07
Outcome: **Failed**
Cause of Failure: **Failed criteria: Verification**

Test Case Information

Name: Iteration11
Type: Baseline Test

Iteration Settings

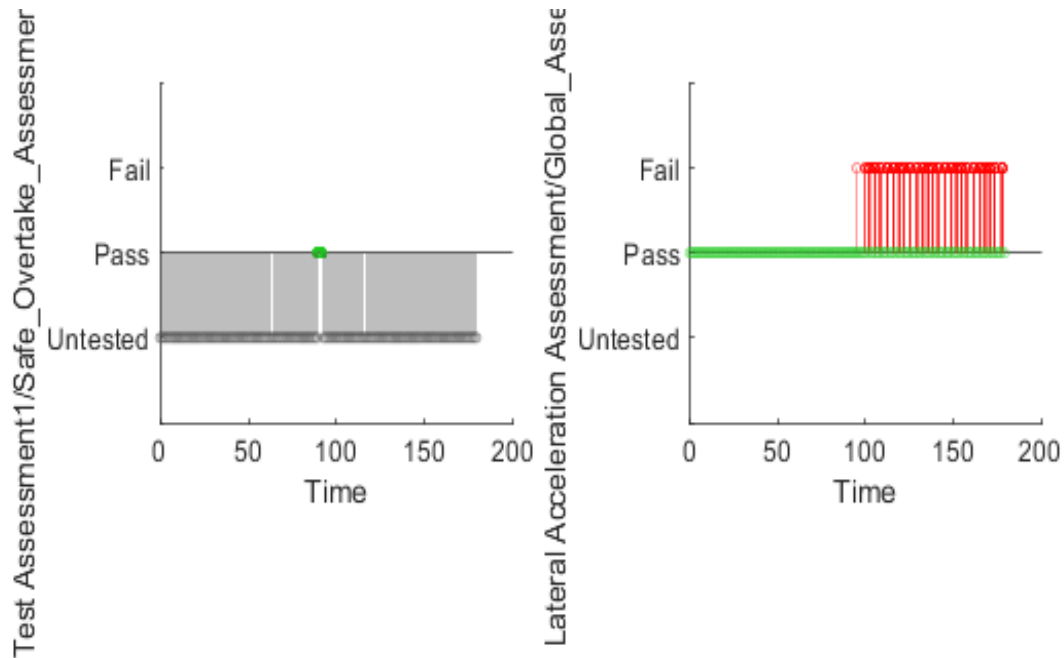
Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 11

Verify Result

Name	Link to Plot
✓ Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)	Link
✗ Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)	Link

Name
✓ Test Assessment1/Safe_Overtake_Assessment:verify(duration(lateral_dev > 5 && lateral_dev < 3,sec)<1)
✗ Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)



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Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance_L
Simulation Mode: normal
Override SIL or PIL Mod 0
e:
Configuration Set: Configuration
Start Time: 0
Stop Time: 180
Checksum: 793506339 4058775249 717268720 3183837224

Simulink Version: 10.0
 Model Version: 1.7
 Model Author: alber
 Date: Tue Jun 22 20:37:50 2021
 User ID: alber
 Model Path: D:\Documenti\GitHub\dynamic-obstacle-avoidance\Code\MPC_L\Dynamic_obstacle_avoidance_L.slx
 Machine Name: LAPTOP-OGD8JCHC
 Solver Name: ode45
 Solver Type: Variable-Step
 Max Step Size: 0.001
 Simulation Start Time: 2021-06-22 21:49:50
 Simulation Stop Time: 2021-06-22 21:54:05
 Platform: PCWIN64

Parameter Overrides

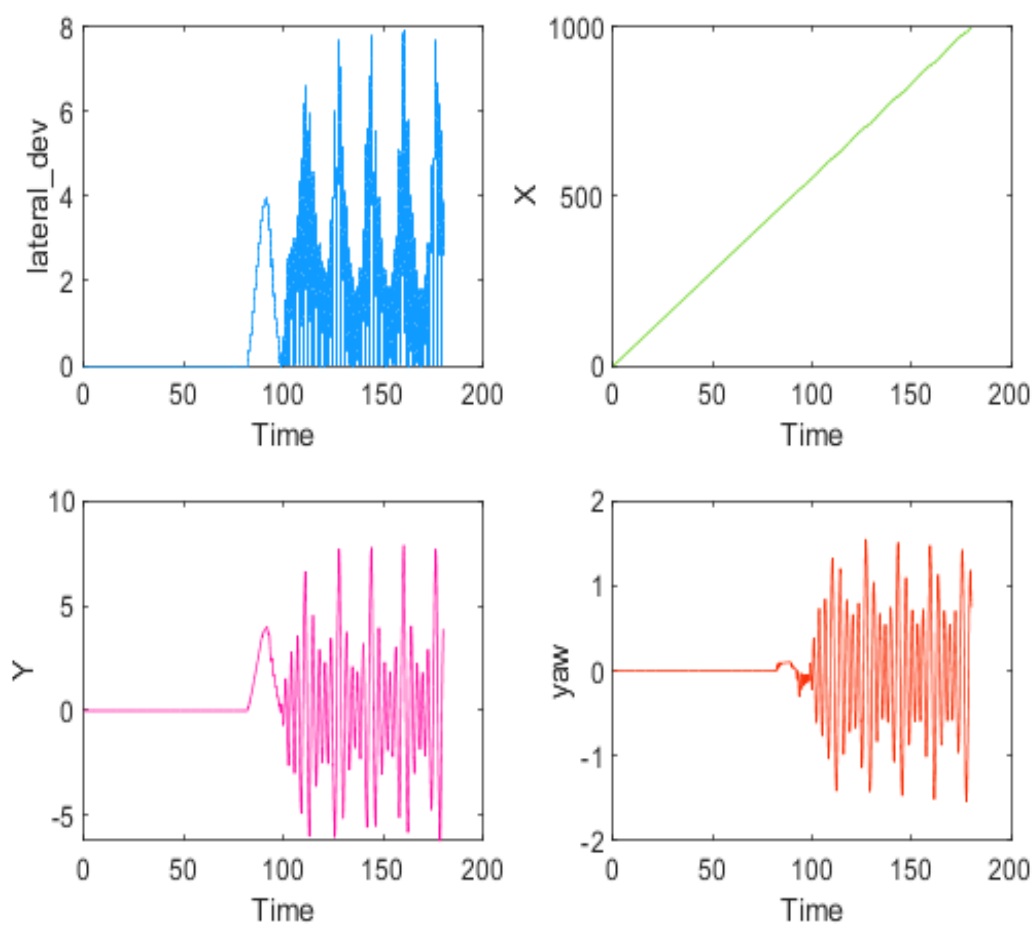
Workspace Variable	Value	Source	Model Element
Parameter Set 11			
Ts	0.005	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/ , Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/MATLAB Function, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/Sampling/Counter Free-Running1, Dynamic_obstacle_avoidance_L/Subsystem/Calculating deviation from reference/To Workspace2, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace1, Dynamic_obstacle_avoidance_

			L/Subsystem/Data to Workspace/To Workspace4, Dynamic_obstacle_avoidance_L/Subsystem/Data to Workspace/To Workspace5, Dynamic_obstacle_avoidance_L/Subsystem/Dynamic Model/C_r, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/Constant5, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/MATLAB Function1, Dynamic_obstacle_avoidance_L/Subsystem/Obstacle detector/To Workspace, Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/ , Dynamic_obstacle_avoidance_L/Subsystem/Plant generator/Plant Model Generator, Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Counter Free-Running, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/MATLAB Function
WOV	[30 30 8 30]	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant
p	15	base workspace	Dynamic_obstacle_avoidance_L/Subsystem/Sample map/Selector, Dynamic_obstacle_avoidance_L/Subsystem/Subsystem/Adaptive MPC Controller/Constant1

Simulation Output

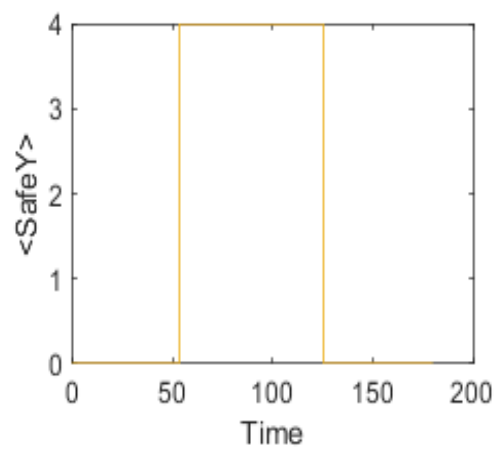
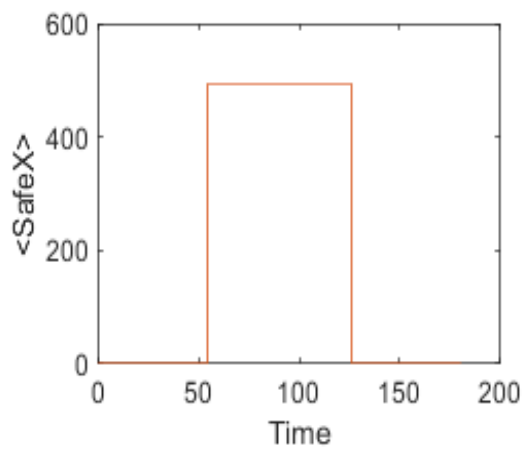
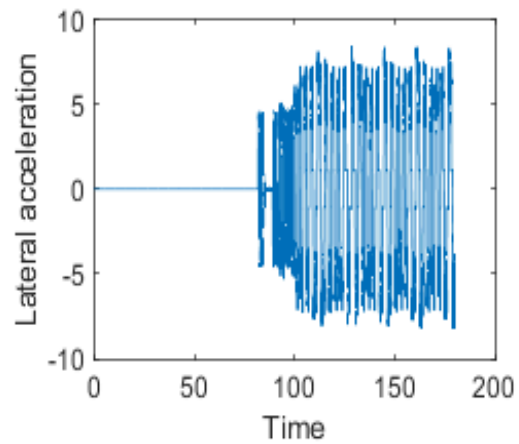
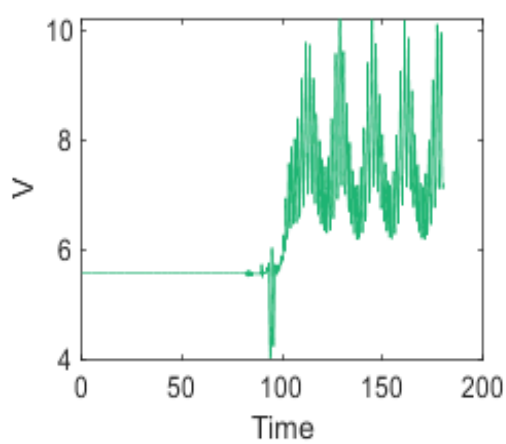
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
lateral_dev	double		0.005	zoh	union	Link
X	double		Continuous	linear	union	Link
Y	double		Continuous	linear	union	Link
yaw	double		Continuous	linear	union	Link
V	double		Continuous	linear	union	Link
Lateral acceleration	double		Continuous	linear	union	Link
<SafeX>	double		0.005	zoh	union	Link
<SafeY>	double		0.005	zoh	union	Link
<EndX>	double		0.005	zoh	union	Link
<EndY>	double		0.005	zoh	union	Link
<DetPoint>(1,1)	double		0.005	zoh	union	Link
<EntryPoint>(1,1)	double		0.005	zoh	union	Link
<DetPoint>(1,2)	double		0.005	zoh	union	Link
<DetPoint>(1,3)	double		0.005	zoh	union	Link
<DetPoint>(1,4)	double		0.005	zoh	union	Link
<EntryPoint>(1,2)	double		0.005	zoh	union	Link
<EntryPoint>(1,3)	double		0.005	zoh	union	Link
<EntryPoint>(1,4)	double		0.005	zoh	union	Link

Name	Data Type	Units	Sample Time	Interp	Sync
lateral_dev	double		0.005	zoh	union
X	double		Continuous	linear	union
Y	double		Continuous	linear	union
yaw	double		Continuous	linear	union



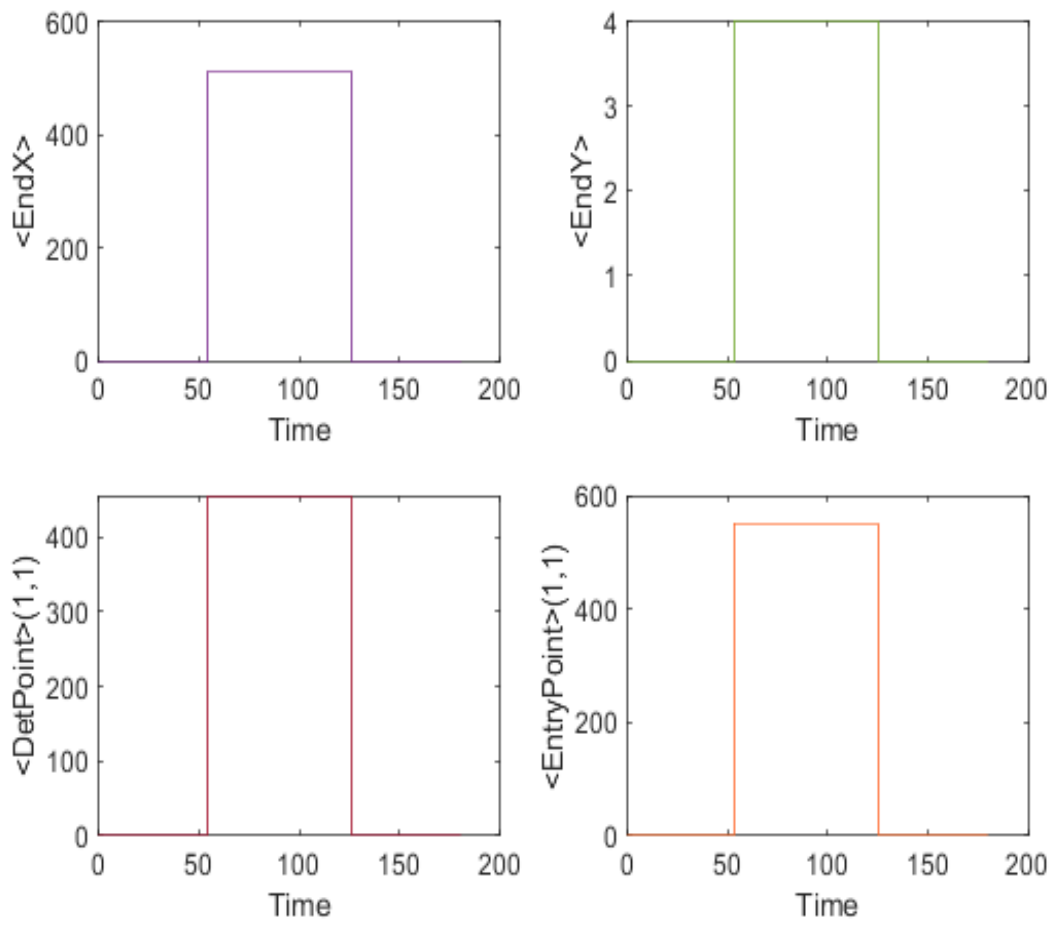
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Name	Data Type	Units	Sample Time	Interp	Sync
V	double		Continuous	linear	union
Lateral acceleration	double		Continuous	linear	union
<SafeX>	double		0.005	zoh	union
<SafeY>	double		0.005	zoh	union



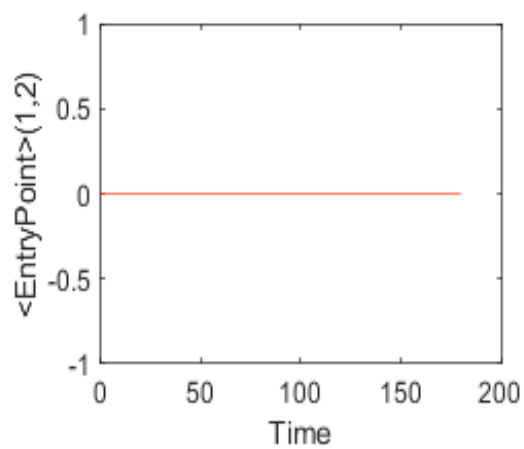
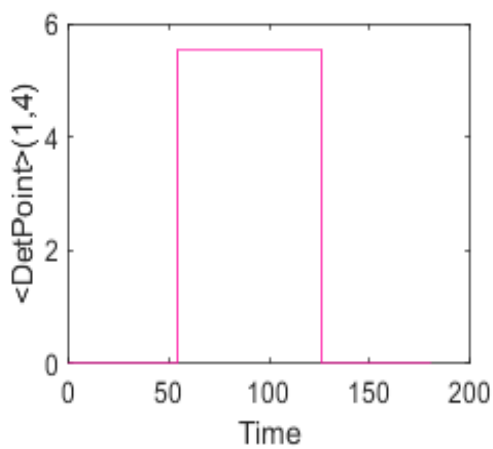
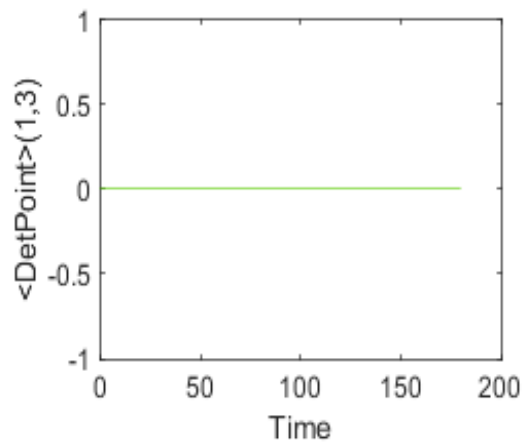
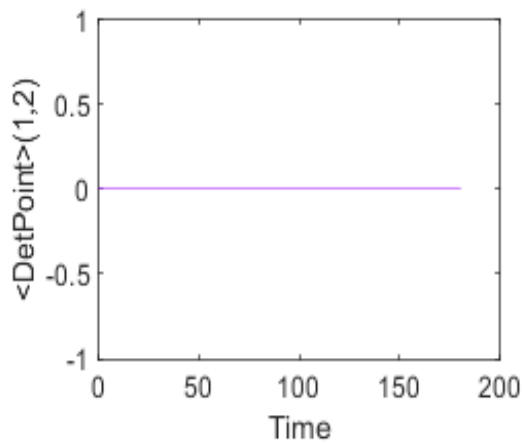
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Name	Data Type	Units	Sample Time	Interp	Sync
<EndX>	double		0.005	zoh	union
<EndY>	double		0.005	zoh	union
<DetPoint>(1,1)	double		0.005	zoh	union
<EntryPoint>(1,1)	double		0.005	zoh	union



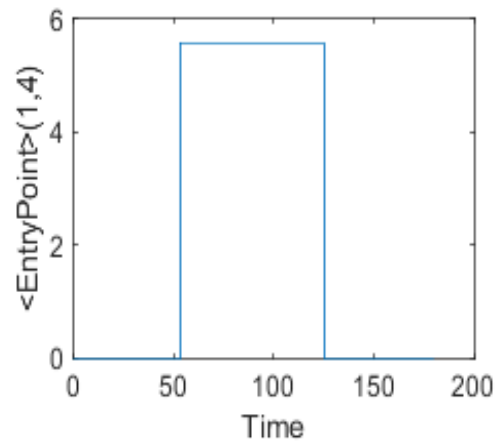
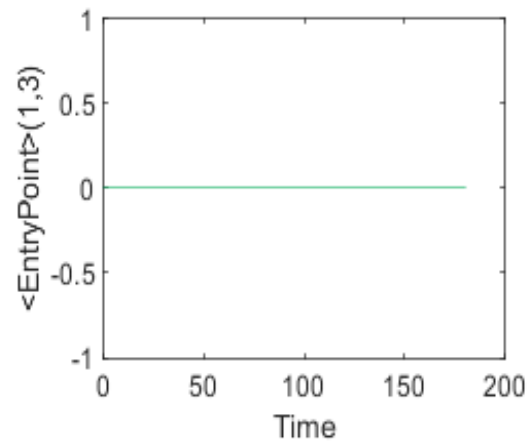
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Name	Data Type	Units	Sample Time	Interp	Sync
<DetPoint>(1,2)	double		0.005	zoh	union
<DetPoint>(1,3)	double		0.005	zoh	union
<DetPoint>(1,4)	double		0.005	zoh	union
<EntryPoint>(1,2)	double		0.005	zoh	union



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Name	Data Type	Units	Sample Time	Interp	Sync
<EntryPoint>(1,3)	double		0.005	zoh	union
<EntryPoint>(1,4)	double		0.005	zoh	union



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