Report Generated by Test Manager

Title: Husky G2G Test Report

Author: Tanmay Samak and Chinmay Samak

Date: 12-Mar-2025 16:21:13

Test Environment

Platform: PCWIN64 MATLAB: (R2024b)

Summary

Name	Outcome	Duration (Seconds)
Results: 2025-Mar-12 14:26:36	6 🕏	6306.914
PathTracking	6 🕏	6306.731
I <u>Iteration1</u>	②	971.627
I <u>Iteration2</u>	②	986.192
I <u>Iteration3</u>	②	966.31
I <u>Iteration4</u>	②	981.559
I <u>Iteration5</u>	②	947.363
■ Iteration6	⊘	1453.52

Results: 2025-Mar-12 14:26:36

Result Type: Result Set Parent: None

Start Time: 12-Mar-2025 14:26:38 End Time: 12-Mar-2025 16:11:45 Outcome: Total: 6, Passed: 6

Back to Report Summary

PathTracking

Test Result Information

Result Type: Test Case Result

Parent: Results: 2025-Mar-12 14:26:36

Start Time: 12-Mar-2025 14:26:38 End Time: 12-Mar-2025 16:11:45

Outcome: Passed

Test Case Information

Name: PathTracking Type: Baseline Test

Test Case Requirements

Description: Path Tracking Reach goal Document: Requirements.slreqx

Iteration1

Test Result Information

Result Type: Test Iteration Result

Parent: PathTracking

Start Time: 12-Mar-2025 14:26:38 End Time: 12-Mar-2025 14:42:50

Outcome: Passed

Description:

Test Case Information

Name: Iteration1
Type: Baseline Test

Iteration Settings

Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 1

Simulation

System Under Test Information

Model: Husky_G2G Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration

Start Time: 0

Stop Time: 963.2000000000005

Checksum: 3259350194 667955774 4111217148 2598863743

Simulink Version: 24.2 Model Version: 2.20 Model Author: tsamak

Date: Wed Mar 12 14:19:45 2025

User ID: tsamak

Model Path: C:\Users\tsamak\Downloads\autodrive_husky_g2g

_mbse\Husky_G2G.slx

Machine Name: AUE-VKROVI-D8
Solver Name: VariableStepDiscrete

Solver Type: Variable-Step

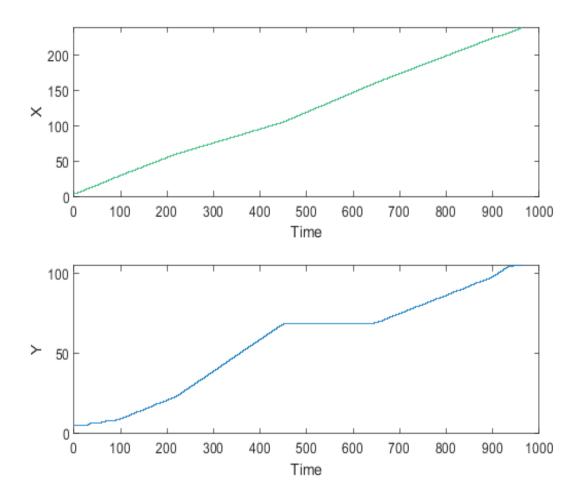
Platform: PCWIN64

Parameter Overrides

t di dilicter overrides						
Workspace Variab	Value	Source	Model Element			
le						
Parameter Set 1						
waypoints	236x2 double	DataDictionary.sld d	MotionControl/Constant			

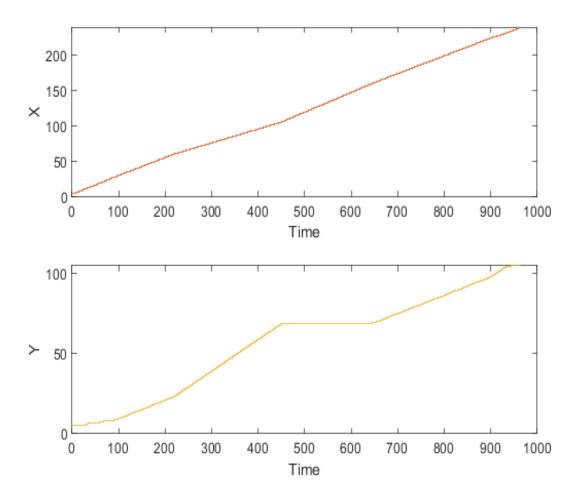
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
X	double	i 	1	zoh	union	<u>Link</u>
Y	double	 	1	zoh	union	<u>Link</u>
X	double	i 	1	zoh	union	Link
Y	double	 	1	zoh	union	<u>Link</u>
outputOfPurePursui t	double		Continuous	linear	union	<u>Link</u>
currentPose(1)	double		1	zoh	union	<u>Link</u>
currentPose(2)	double	 	1	zoh	union	<u>Link</u>
currentPose(3)	double		1	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
X	double		1	zoh	union
Y	double		1	zoh	union



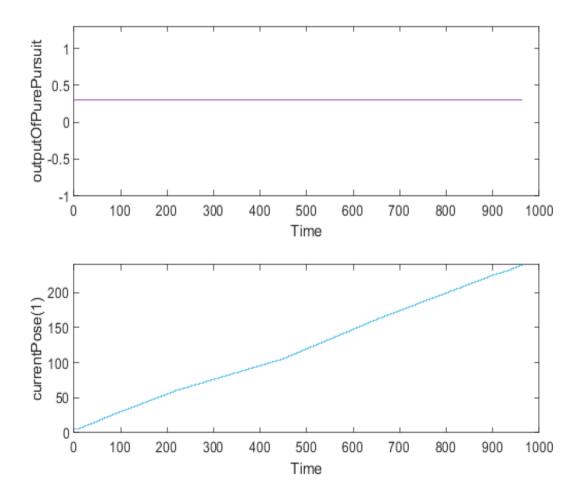
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
X	double		1	zoh	union
Y	double		1	zoh	union



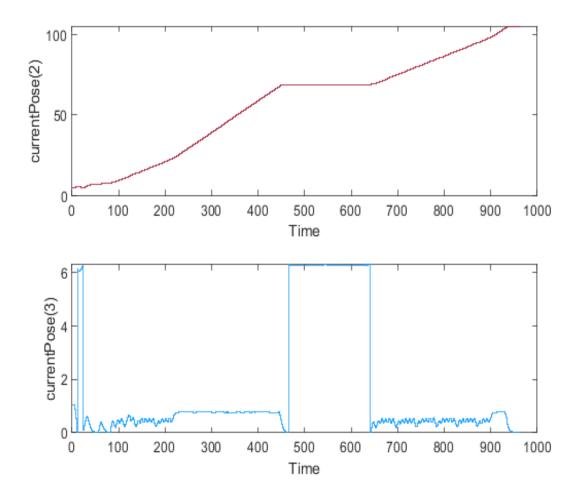
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
outputOfPurePursui t	double		Continuous	linear	union
currentPose(1)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
currentPose(2)	double		1	zoh	union
currentPose(3)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Simulation Logs: Model '<u>Husky G2G</u>' contains 1 algebraic loops.

Back to Report Summary

Test Logs: No baseline criteria evaluthis test.	uation performed as no baseline data is available for
Back to Report Summary	
Custom Criteria Result	Information
Diagnostic Record: Outcome:	Passed
Event:	VerificationPassed
Event.	verificationPassed
VerificationPassed in custon	n criteria of sltest.testmanager.TestCase.
Framework Diagnostic:	
verifyLessThan passed.	
Actual Value:	
0.27469999999999	
Maximum Value (Exclusiv	ve):
0.500000000000000	
Diagnostic Record:	
Diagnostic Record: Outcome:	Passed
Event:	VerificationPassed
Lveill.	vermeationrasseu
VerificationPassed in custon	n criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThan passed.

Actual Value:

0.00199999999995

Maximum Value (Exclusive):

0.5000000000000000

Iteration2

Test Result Information

Result Type: Test Iteration Result

Parent: PathTracking

Start Time: 12-Mar-2025 14:42:50 End Time: 12-Mar-2025 14:59:16

Outcome: Passed

Description:

Hybrid A*

Test Case Information

Name: Iteration2 Type: Baseline Test

Iteration Settings

Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 2

Simulation

System Under Test Information

Model: Husky_G2G Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration

Start Time: 0 Stop Time: 979

Checksum: 3259350194 667955774 4111217148 2598863743

Simulink Version: 24.2 Model Version: 2.20 Model Author: tsamak

Date: Wed Mar 12 14:19:45 2025

User ID: tsamak

Model Path: C:\Users\tsamak\Downloads\autodrive_husky_g2g

_mbse\Husky_G2G.slx

Machine Name: AUE-VKROVI-D8
Solver Name: VariableStepDiscrete

Solver Type: Variable-Step

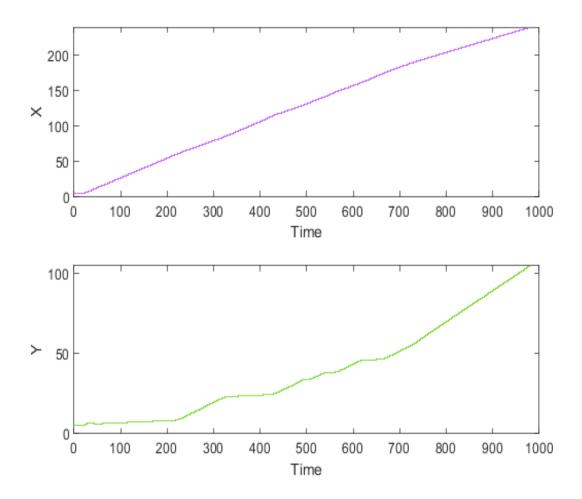
Platform: PCWIN64

Parameter Overrides

Workspace Variab	Value	Source	Model Element
le			
Parameter Set 2			
waypoints	269x2 double	DataDictionary.sld d	MotionControl/Constant

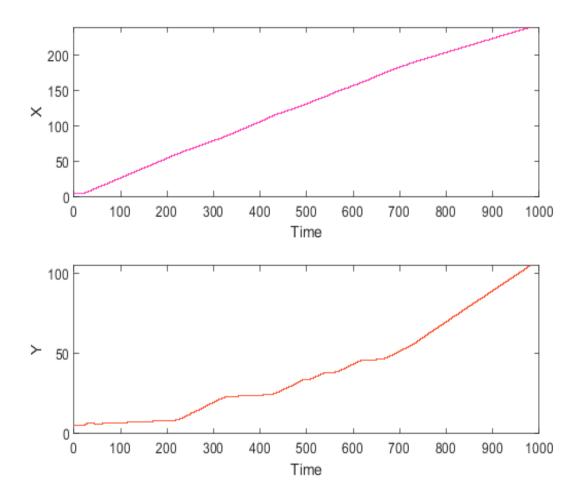
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
X	double		1	zoh	union	<u>Link</u>
Y	double	 	1	zoh	union	<u>Link</u>
X	double	 	1	zoh	union	Link
Y	double	 	1	zoh	union	Link
outputOfPurePursui t	double		Continuous	linear	union	<u>Link</u>
currentPose(1)	double		1	zoh	union	<u>Link</u>
currentPose(2)	double		1	zoh	union	<u>Link</u>
currentPose(3)	double		1	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
X	double	i 	1	zoh	union
Y	double		1	zoh	union



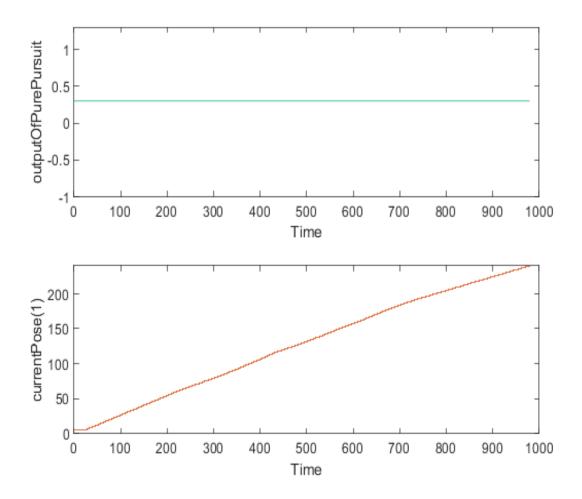
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
X	double		1	zoh	union
Y	double		1	zoh	union



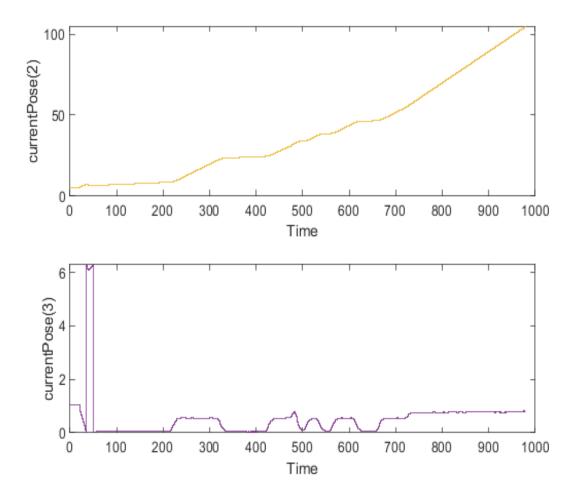
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
outputOfPurePursui t	double		Continuous	linear	union
currentPose(1)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
currentPose(2)	double		1	zoh	union
currentPose(3)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Simulation Logs: Model '<u>Husky G2G</u>' contains 1 algebraic loops.

Back to Report Summary

Test Logs: No baseline criteria evaluation performed as no baseline data is available for this test.							
Back to Report Summary							
Custom Criteria Result I	Information						
Diagnostic Record: Outcome:	Passed						
Event:	VerificationPassed						
Event.	vermeationPasseu						
VerificationPassed in custom	criteria of sltest.testmanager.TestCase.						
Framework Diagnostic:							
verifyLessThan passed.							
Actual Value:							
0.23619999999997							
Maximum Value (Exclusive	۵)٠						
0.500000000000000							
Diagnostic Record:							
Outcome:	Passed						
Event:	VerificationPassed						
VerificationPassed in custom	criteria of sltest.testmanager.TestCase.						

Framework Diagnostic:

verifyLessThan passed.

Actual Value:

0.2445000000000002

Maximum Value (Exclusive):

0.5000000000000000

Iteration3

Test Result Information

Result Type: Test Iteration Result

Parent: PathTracking

Start Time: 12-Mar-2025 14:59:16 End Time: 12-Mar-2025 15:15:22

Outcome: Passed

Description:

Rapidly Exploring Random Tree (RRT)

Test Case Information

Name: Iteration3 Type: Baseline Test

Iteration Settings

Test Overrides

1000 0 10111400						
Parameter Name	Value					
ParameterSet	Parameter Set 3					

Simulation

System Under Test Information

Model: Husky_G2G Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration

Start Time: 0 Stop Time: 962

Checksum: 3259350194 667955774 4111217148 2598863743

Simulink Version: 24.2 Model Version: 2.20 Model Author: tsamak

Date: Wed Mar 12 14:19:45 2025

User ID: tsamak

Model Path: C:\Users\tsamak\Downloads\autodrive_husky_g2g

_mbse\Husky_G2G.slx

Machine Name: AUE-VKROVI-D8
Solver Name: VariableStepDiscrete

Solver Type: Variable-Step

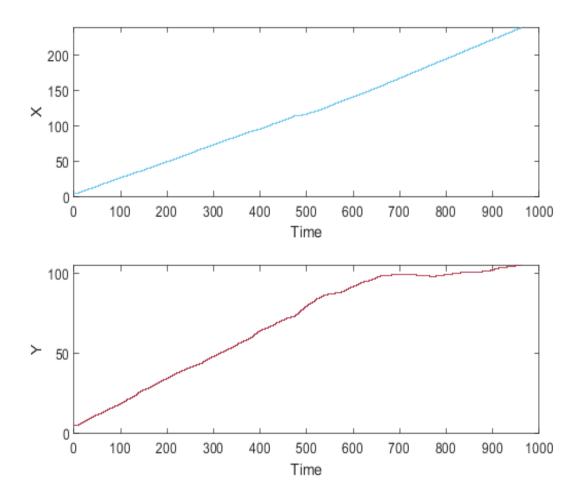
Platform: PCWIN64

Parameter Overrides

Workspace Variab	Value	Source	Model Element					
le								
Parameter Set 3	Parameter Set 3							
waypoints	1148x2 double	DataDictionary.sld d	MotionControl/Constant					

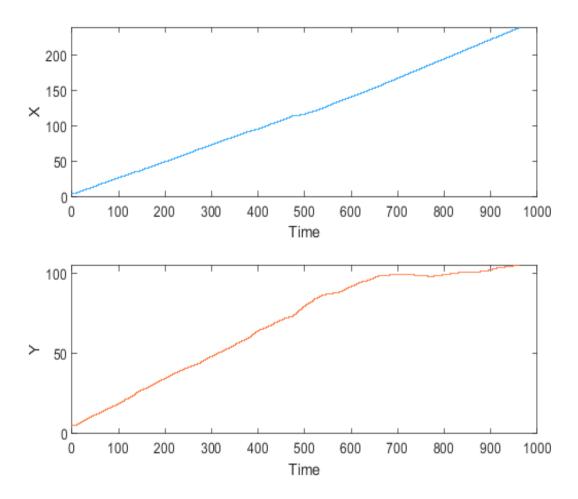
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
X	double		1	zoh	union	<u>Link</u>
Y	double	 	1	zoh	union	<u>Link</u>
X	double	 	1	zoh	union	Link
Y	double	 	1	zoh	union	Link
outputOfPurePursui t	double		Continuous	linear	union	<u>Link</u>
currentPose(1)	double		1	zoh	union	<u>Link</u>
currentPose(2)	double		1	zoh	union	<u>Link</u>
currentPose(3)	double		1	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
X	double	i 	1	zoh	union
Y	double		1	zoh	union



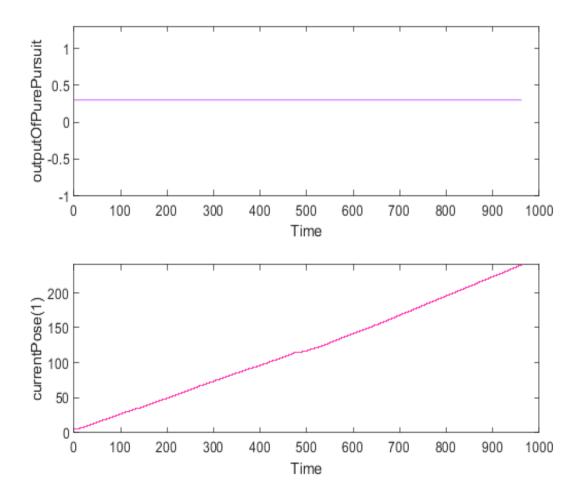
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
X	double		1	zoh	union
Y	double		1	zoh	union



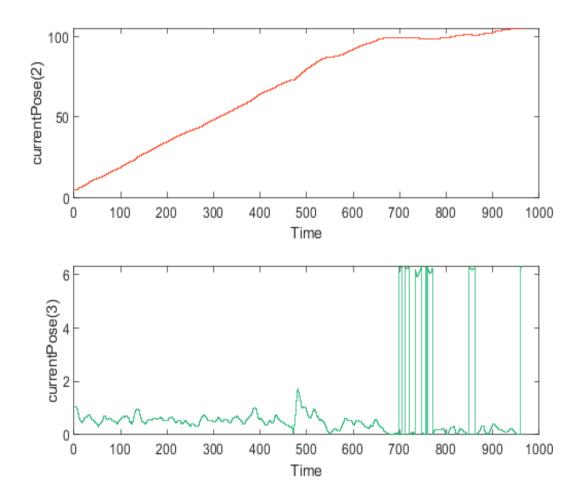
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
outputOfPurePursui t	double		Continuous	linear	union
currentPose(1)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
currentPose(2)	double		1	zoh	union
currentPose(3)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Simulation Logs: Model '<u>Husky G2G</u>' contains 1 algebraic loops.

Back to Report Summary

Test Logs: No baseline criteria evaluation performed as no baseline data is available for this test.							
Back to Report Summary							
Custom Criteria Result I Diagnostic Record:	information						
Outcome:	Passed						
Event:	VerificationPassed						
VerificationPassed in custom	criteria of sltest.testmanager.TestCase.						
Framework Diagnostic:							
verifyLessThan passed.							
Actual Value:							
0.21999999999999							
Maximum Value (Exclusive 0.500000000000000000000000000000000000	e):						
Diagnostic Record:							
Outcome:	Passed						
Event:	VerificationPassed						
VerificationPassed in custom	criteria of sltest.testmanager.TestCase.						

Framework Diagnostic:

verifyLessThan passed.

Actual Value:

0.0060000000000000

Maximum Value (Exclusive):

0.5000000000000000

Iteration4

Test Result Information

Result Type: Test Iteration Result

Parent: <u>PathTracking</u>

Start Time: 12-Mar-2025 15:15:22 End Time: 12-Mar-2025 15:31:44

Outcome: Passed

Description:

RRT*

Test Case Information

Name: Iteration4
Type: Baseline Test

Iteration Settings

Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 4

Simulation

System Under Test Information

Model: Husky_G2G Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration

Start Time: 0

Stop Time: 976.8000000000007

Checksum: 3259350194 667955774 4111217148 2598863743

Simulink Version: 24.2 Model Version: 2.20 Model Author: tsamak

Date: Wed Mar 12 14:19:45 2025

User ID: tsamak

Model Path: C:\Users\tsamak\Downloads\autodrive_husky_g2g

_mbse\Husky_G2G.slx

Machine Name: AUE-VKROVI-D8
Solver Name: VariableStepDiscrete

Solver Type: Variable-Step

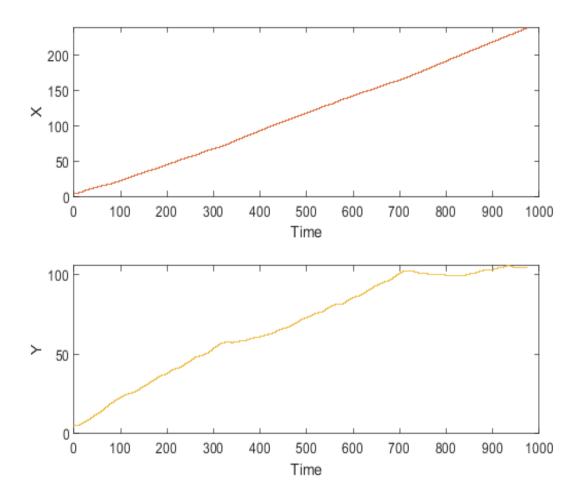
Platform: PCWIN64

Parameter Overrides

Workspace Variab	Value	Source	Model Element
le			
Parameter Set 4			
waypoints	1015x2 double	DataDictionary.sld d	MotionControl/Constant

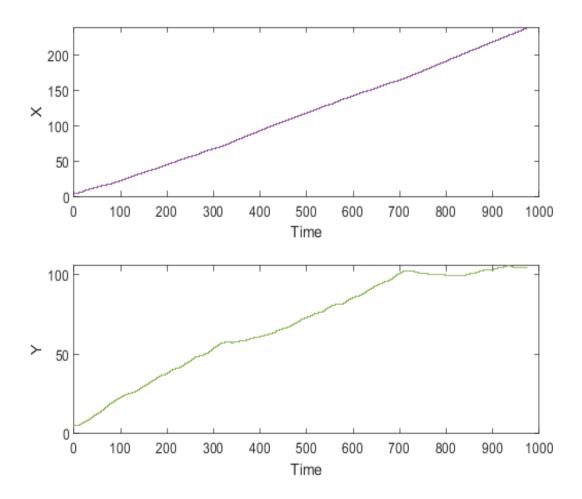
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
X	double		1	zoh	union	<u>Link</u>
Y	double	 	1	zoh	union	<u>Link</u>
X	double	 	11	zoh	union	Link
Y	double	 	11	zoh	union	Link
outputOfPurePursui t	double		Continuous	linear	union	<u>Link</u>
currentPose(1)	double		1	zoh	union	<u>Link</u>
currentPose(2)	double		1	zoh	union	<u>Link</u>
currentPose(3)	double		1	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
X	double	i 	1	zoh	union
Y	double		1	zoh	union



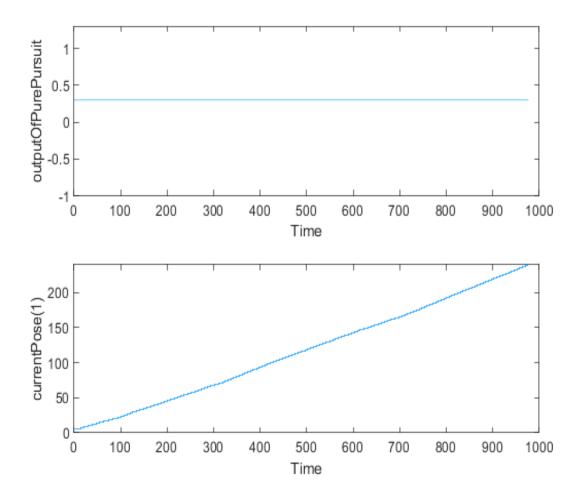
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
X	double		1	zoh	union
Y	double		1	zoh	union



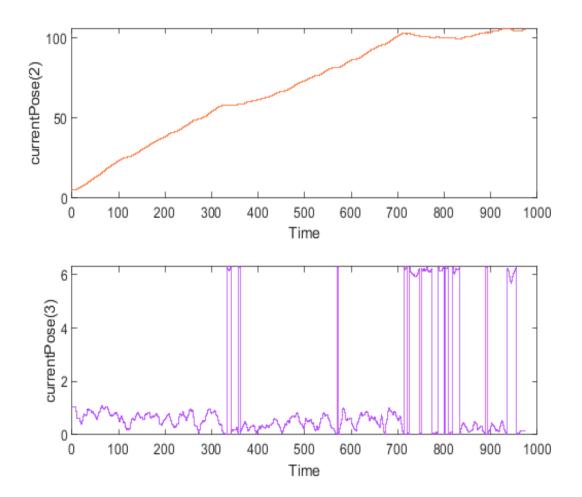
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
outputOfPurePursui t	double		Continuous	linear	union
currentPose(1)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
currentPose(2)	double		1	zoh	union
currentPose(3)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Simulation Logs: Model '<u>Husky G2G</u>' contains 1 algebraic loops.

Back to Report Summary

Test Logs: No baseline criteria evaluation performed as no baseline data is available for this test.							
Back to Report Summary							
Custom Criteria Result I	nformation						
Diagnostic Record: Outcome:	Passed						
Event:	VerificationPassed						
Event.	vermeanonrasseu						
VerificationPassed in custom	criteria of sltest.testmanager.TestCase.						
Framework Diagnostic:							
verifyLessThan passed.							
Actual Value:							
0.42189999999994							
Maximum Value (Exclusive	e):						
0.500000000000000							
							
Diagnostic Record:							
Outcome:	Passed						
Event:	VerificationPassed						
VerificationPassed in custom	criteria of sltest.testmanager.TestCase.						

Framework Diagnostic:

verifyLessThan passed.

Actual Value:

0.004000000000005

Maximum Value (Exclusive):

0.5000000000000000

Iteration5

Test Result Information

Result Type: Test Iteration Result

Parent: <u>PathTracking</u>

Start Time: 12-Mar-2025 15:31:44 End Time: 12-Mar-2025 15:47:31

Outcome: Passed

Description:

Bi-Directional RRT

Test Case Information

Name: Iteration5 Type: Baseline Test

Iteration Settings

Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 5

Simulation

System Under Test Information

Model: Husky_G2G Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration

Start Time: 0

Stop Time: 942.2000000000005

Checksum: 3259350194 667955774 4111217148 2598863743

Simulink Version: 24.2 Model Version: 2.20 Model Author: tsamak

Date: Wed Mar 12 14:19:45 2025

User ID: tsamak

Model Path: C:\Users\tsamak\Downloads\autodrive_husky_g2g

_mbse\Husky_G2G.slx

Machine Name: AUE-VKROVI-D8
Solver Name: VariableStepDiscrete

Solver Type: Variable-Step

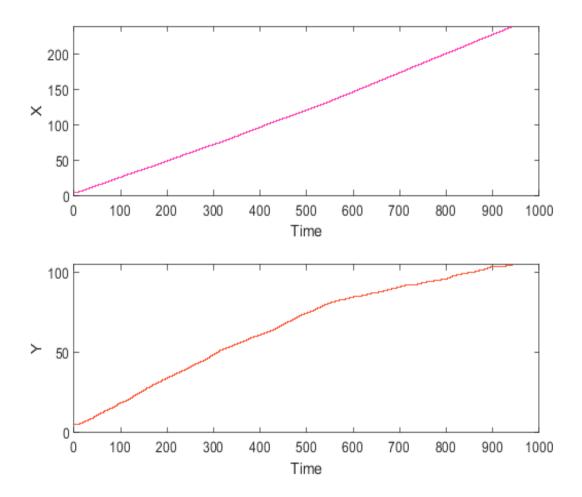
Platform: PCWIN64

Parameter Overrides

Workspace Variab	Value	Source	Model Element
le			
Parameter Set 5			
waypoints	959x2 double	DataDictionary.sld d	MotionControl/Constant

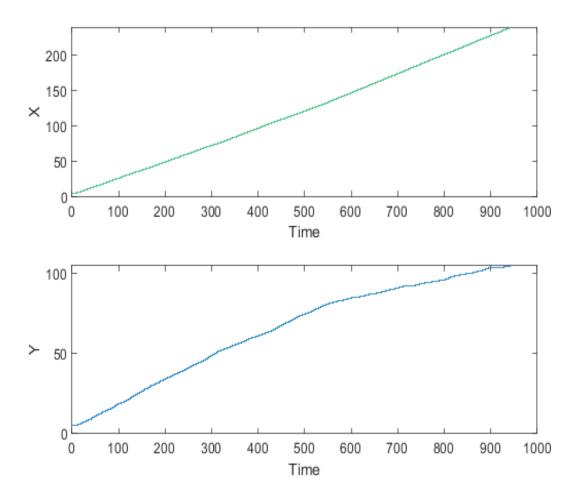
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
X	double		1	zoh	union	<u>Link</u>
Y	double	 	1	zoh	union	Link
X	double	 	11	zoh	union	Link
Y	double	i 	1	zoh	union	<u>Link</u>
outputOfPurePursui t	double		Continuous	linear	union	Link
currentPose(1)	double		1	zoh	union	<u>Link</u>
currentPose(2)	double		1	zoh	union	<u>Link</u>
currentPose(3)	double		1	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
X	double	 	1	zoh	union
Y	double	 	1	zoh	union



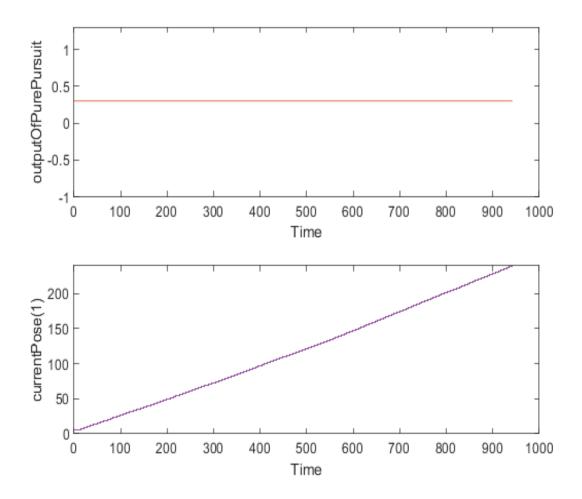
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
X	double		1	zoh	union
Y	double		1	zoh	union



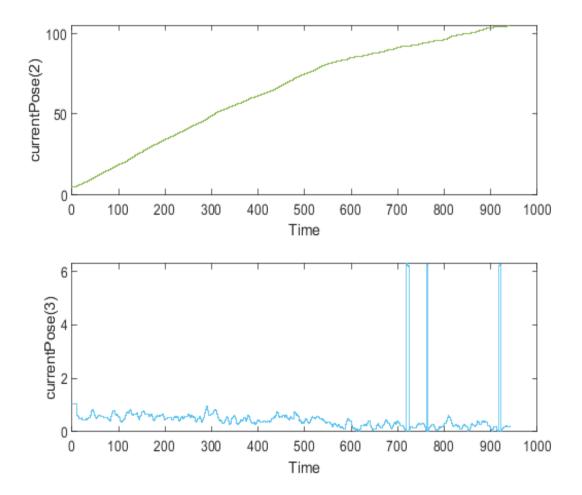
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
outputOfPurePursui t	double		Continuous	linear	union
currentPose(1)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
currentPose(2)	double		1	zoh	union
currentPose(3)	double		1	zoh	union



Back to Report SummaryBack to Signal Summary

Simulation Logs: Model '<u>Husky G2G</u>' contains 1 algebraic loops.

Back to Report Summary

Test Logs: No baseline criteria evalu this test.	ation performed as no baseline data is available for
Back to Report Summary	
Custom Criteria Result I	nformation
Diagnostic Record:	Dagged
Outcome:	Passed
Event:	VerificationPassed
	criteria of sltest.testmanager.TestCase.
Framework Diagnostic:	
verifyLessThan passed.	
Actual Value:	
0.28809999999986	
Maximum Value (Exclusive	e):
0.500000000000000	
Diagnostic Record:	
Outcome:	Passed
Event:	VerificationPassed
VerificationPassed in custom	criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThan passed.

Actual Value:

0.061300000000003

Maximum Value (Exclusive):

0.5000000000000000

Iteration6

Test Result Information

Result Type: Test Iteration Result

Parent: PathTracking

Start Time: 12-Mar-2025 15:47:31 End Time: 12-Mar-2025 16:11:45

Outcome: Passed

Description:

Probabilistic Roadmaps (PRM)

Test Case Information

Name: Iteration6
Type: Baseline Test

Iteration Settings

Test Overrides

Parameter Name	Value
ParameterSet	Parameter Set 6

Simulation

System Under Test Information

Model: Husky_G2G Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration

Start Time: 0

Checksum: 3259350194 667955774 4111217148 2598863743

Simulink Version: 24.2 Model Version: 2.20 Model Author: tsamak

Date: Wed Mar 12 14:19:45 2025

User ID: tsamak

Model Path: C:\Users\tsamak\Downloads\autodrive_husky_g2g

_mbse\Husky_G2G.slx

Machine Name: AUE-VKROVI-D8
Solver Name: VariableStepDiscrete

Solver Type: Variable-Step

Platform: PCWIN64

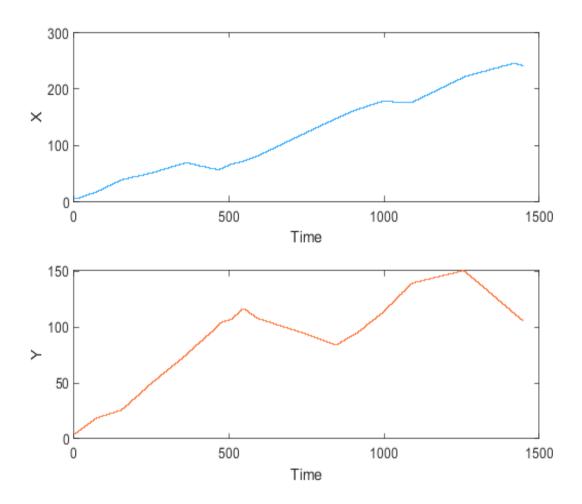
Parameter Overrides

Workspace Variab	Value	Source	Model Element					
le								
Parameter Set 6	Parameter Set 6							
waypoints	1000x2 double	DataDictionary.sld d	MotionControl/Constant					

Simulation Output

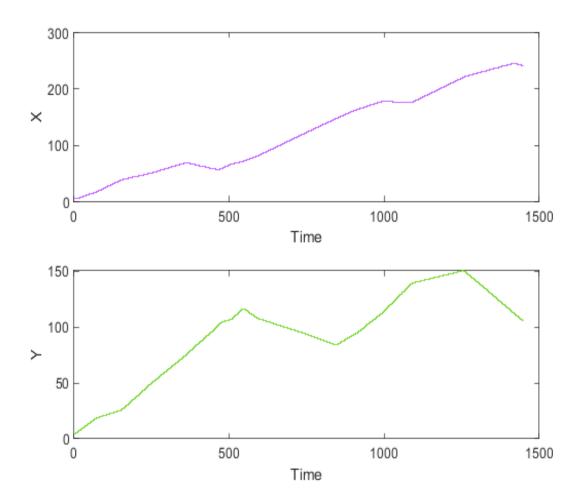
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
X	double		1	zoh	union	<u>Link</u>
Y	double	 	1	zoh	union	Link
X	double	 	11	zoh	union	Link
Y	double	i 	1	zoh	union	<u>Link</u>
outputOfPurePursui t	double		Continuous	linear	union	Link
currentPose(1)	double		1	zoh	union	<u>Link</u>
currentPose(2)	double		1	zoh	union	<u>Link</u>
currentPose(3)	double		1	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
X	double	 	1	zoh	union
Y	double	 	1	zoh	union



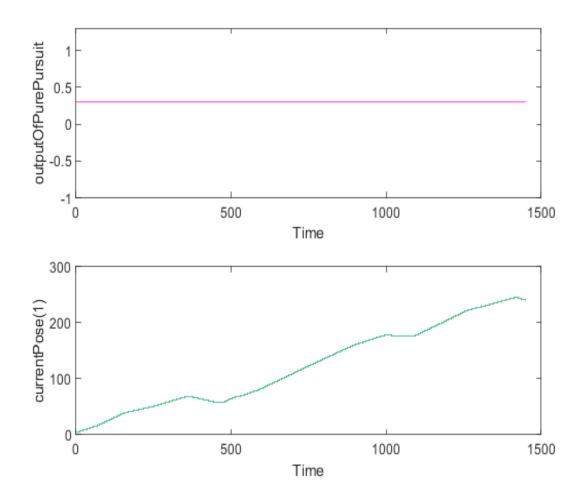
Back to Report SummaryBack to Signal Summary

Name	Data Type	Units	Sample Time	Interp	Sync
X	double		1	zoh	union
Y	double		1	zoh	union



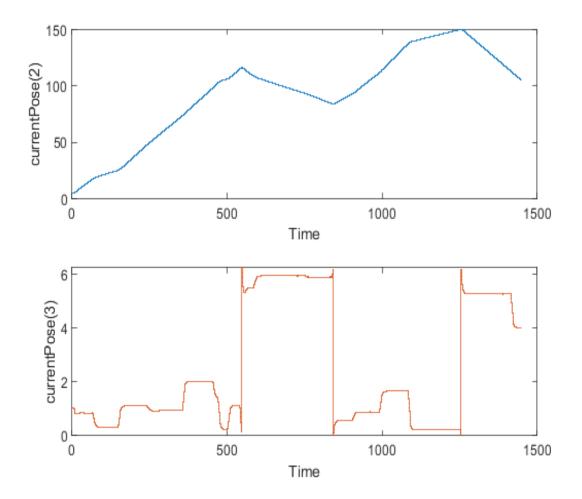
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Name	Data Type	Units	Sample Time	Interp	Sync
outputOfPurePursui t	double		Continuous	linear	union
currentPose(1)	double		1	zoh	union



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Name	Data Type	Units	Sample Time	Interp	Sync
currentPose(2)	double		1	zoh	union
currentPose(3)	double		1	zoh	union



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Simulation Logs: Model '<u>Husky G2G</u>' contains 1 algebraic loops.

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Test Logs: No baseline criteria evaluthis test.	uation performed as no baseline data is available for
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Custom Criteria Result	Information
Diagnostic Record: Outcome:	Passed
Event:	VerificationPassed
Event.	verificationPasseu
VerificationPassed in custon	n criteria of sltest.testmanager.TestCase.
Framework Diagnostic:	
verifyLessThan passed.	
Actual Value:	
0.04449999999999	
Maximum Value (Exclusiv	re):
0.5000000000000000	- ,
Diagnostic Record:	
Outcome:	Passed
Event:	VerificationPassed
VerificationPassed in custon	n criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThan passed.

Actual Value: 0.020700000000005 Maximum Value (Exclusive): 0.5000000000000000
