







Report Generated by Test Manager

Title: Helicopter outer loop test
Author: bpotter
Date: 13-Mar-2023 17:57:36

Test Environment

Platform: MACI64
MATLAB: (R2021b)

Summary

Name	Outcome	Duration (Seconds)
 HeliLoopTest	6 	441.804
 Helicopter Pitch Control Test	2 	151.131
 SmallPositiveStep		79.763
 SmallNegativeStep		71.023
 Helicopter Roll Control Test	2 	143.46
 SmallPositiveStep		72.299
 SmallNegativeStep		71.037
 Helicopter Yaw Control Test	2 	146.916
 SmallPositiveStep		73.549
 SmallNegativeStep		73.227

HeliLoopTest

Test Result Information

Result Type:	Test File Result
Parent:	None
Start Time:	13-Mar-2023 17:50:09
End Time:	13-Mar-2023 17:57:31
Outcome:	Total: 6, Failed: 6

Test Suite Information

Name: HeliLoopTest

[Back to Report Summary](#)

Helicopter Pitch Control Test

Test Result Information

Result Type:	Test Suite Result
Parent:	HeliLoopTest
Start Time:	13-Mar-2023 17:50:09
End Time:	13-Mar-2023 17:52:40
Outcome:	Total: 2, Failed: 2

Test Suite Information

Name: Helicopter Pitch Control Test

[Back to Report Summary](#)

SmallPositiveStep

Test Result Information

Result Type:	Test Case Result
Parent:	Helicopter Pitch Control Test
Start Time:	13-Mar-2023 17:50:09
End Time:	13-Mar-2023 17:51:29

Outcome: **Failed**
Cause of Failure: **Errors running test case**
Description:

Pitch step of +1 degree to determine tracking, overshoot and rise time.

Test Case Information

Name: SmallPositiveStep
Type: Simulation Test

Test Case Requirements

Description: SR_6 Attitude Rate Tracking Performance
Document: HelicopterSystemRequirements.slreqx

Simulation

System Under Test Information

Model: HelicopterSystem
Release: Current
Simulation Mode: normal
Override SIL or PIL: 0
Mode:
Configuration Set: Configuration
Start Time: 0
Stop Time: 10
Checksum: 1537542357 1654829112 2870649001 2292590244
Simulink Version: 10.4
Model Version: 1.24
Model Author: bpotter
Date: Mon May 11 15:42:30 2020
User ID: halilceylan
Model Path: /Users/halilceylan/Desktop/AnSyMo-Simulink-Mutator/matlab_workspace/heli/work/HelicopterSystem.slx

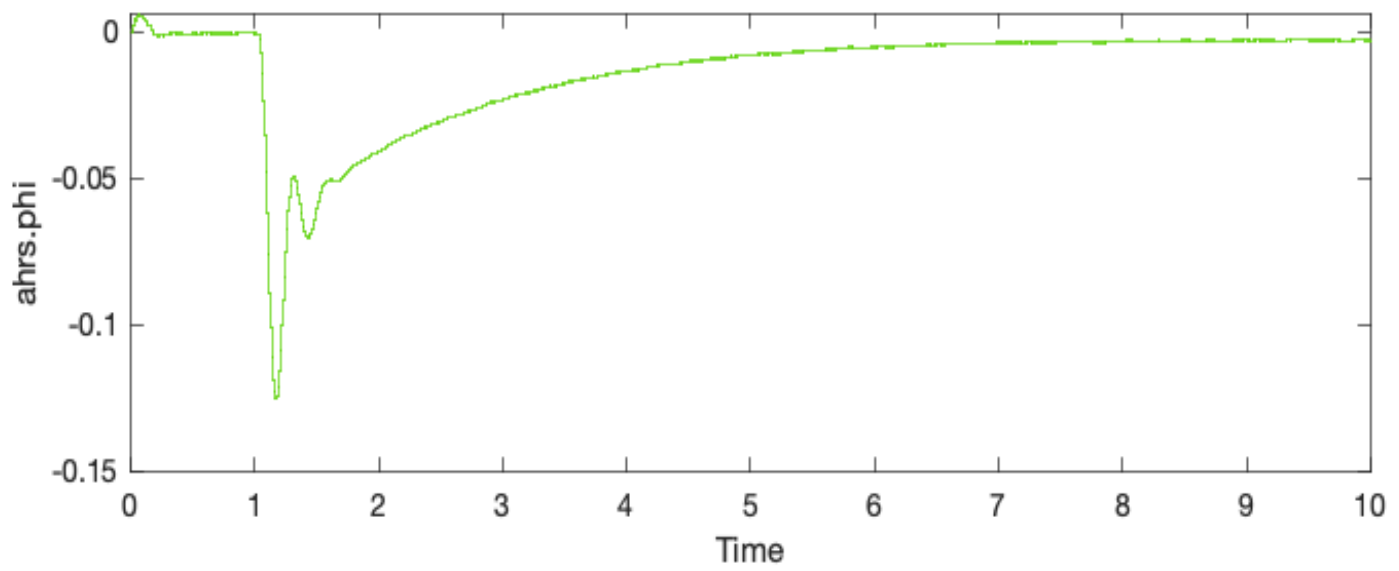
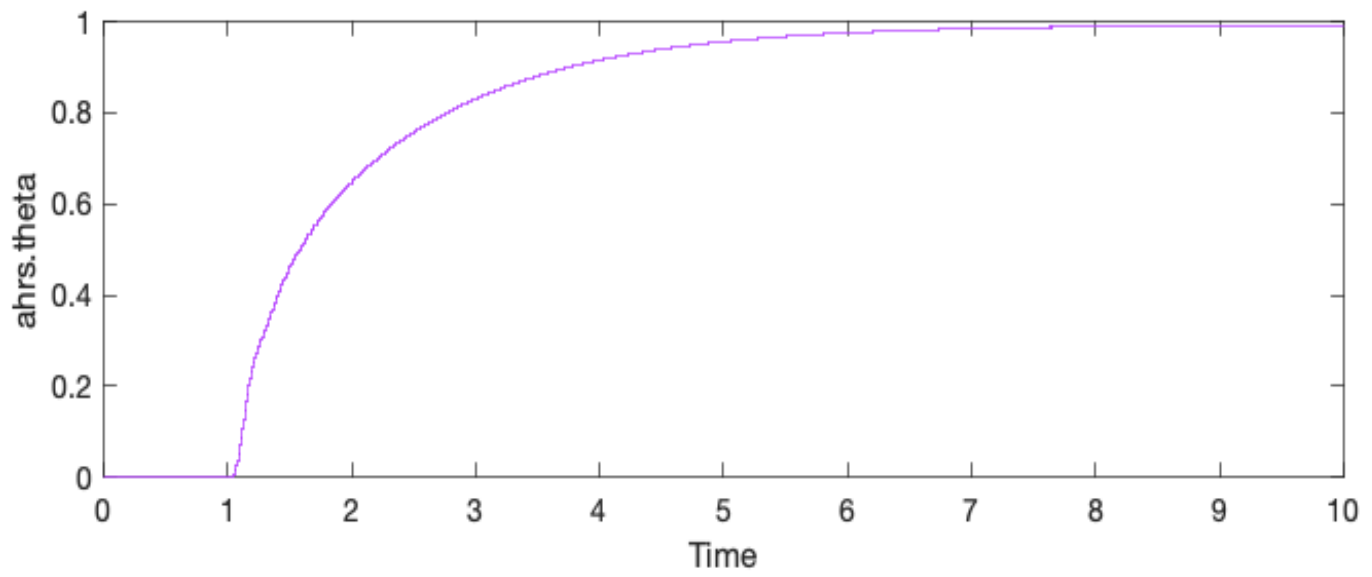
Solver Name: ode23t
Solver Type: Variable-Step
Max Step Size: 0.001

Simulation Start Time: 2023-03-13 17:50:09
Simulation Stop Time: 2023-03-13 17:51:26
Platform: MACI64

Simulation Output

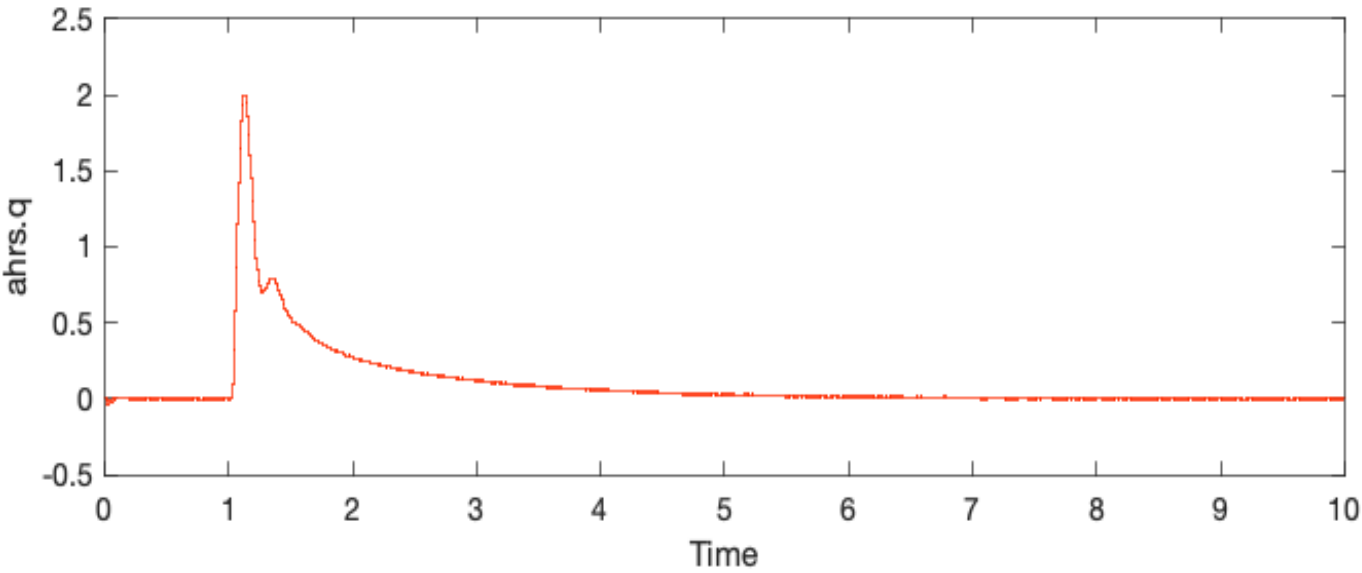
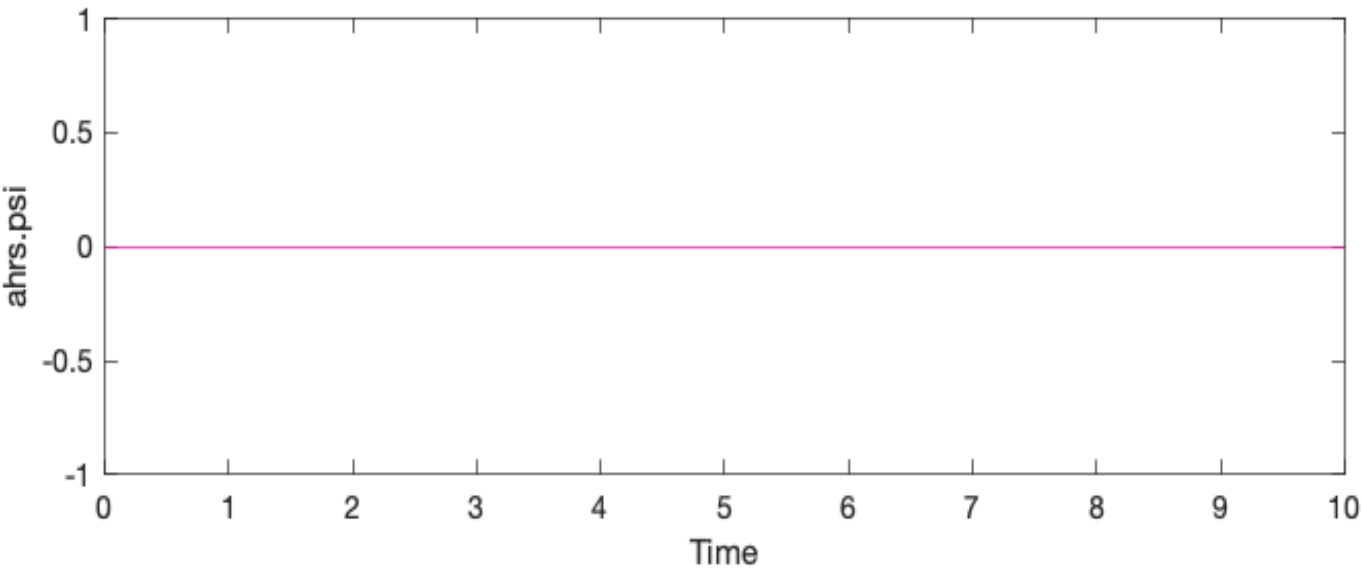
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
ahrs.theta	double	deg	0.01	zoh	union	Link
ahrs.phi	double	deg	0.01	zoh	union	Link
ahrs.psi	double	deg	0.01	zoh	union	Link
ahrs.q	double	deg/sec	0.01	zoh	union	Link
ahrs.p	double	deg/sec	0.01	zoh	union	Link
ahrs.r	double	deg/sec	0.01	zoh	union	Link
ahrs.valid	boolean		0.01	zoh	union	Link

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.theta	double	deg	0.01	zoh	union
ahrs.phi	double	deg	0.01	zoh	union



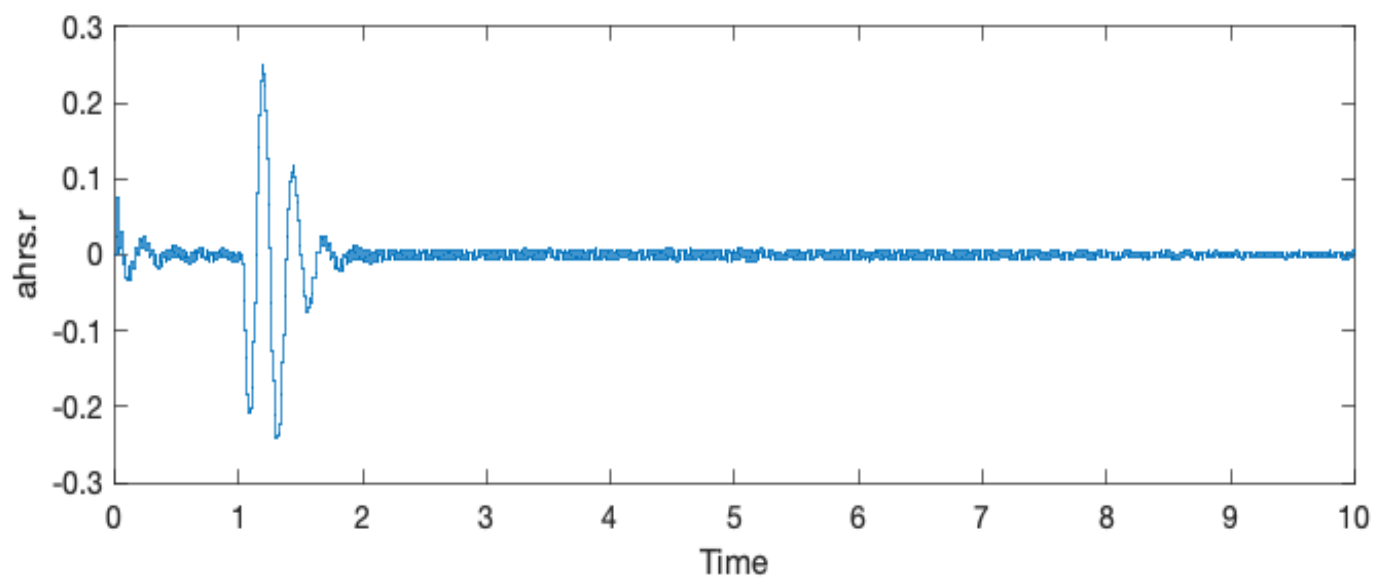
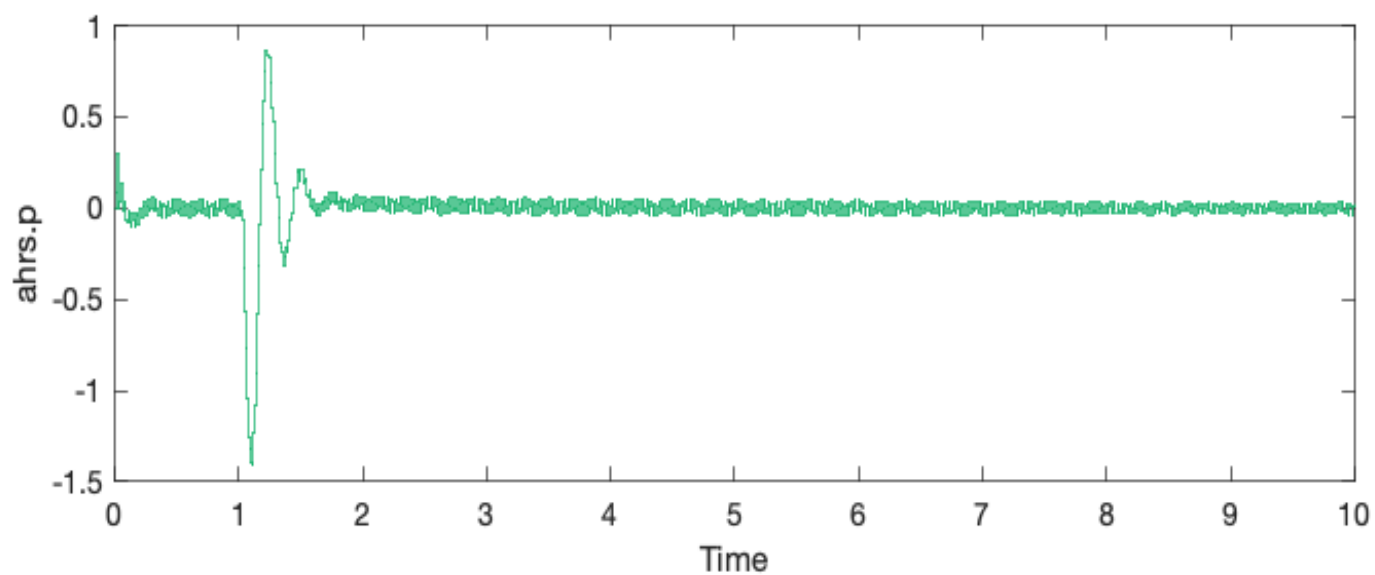
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.psi	double	deg	0.01	zoh	union
ahrs.q	double	deg/sec	0.01	zoh	union



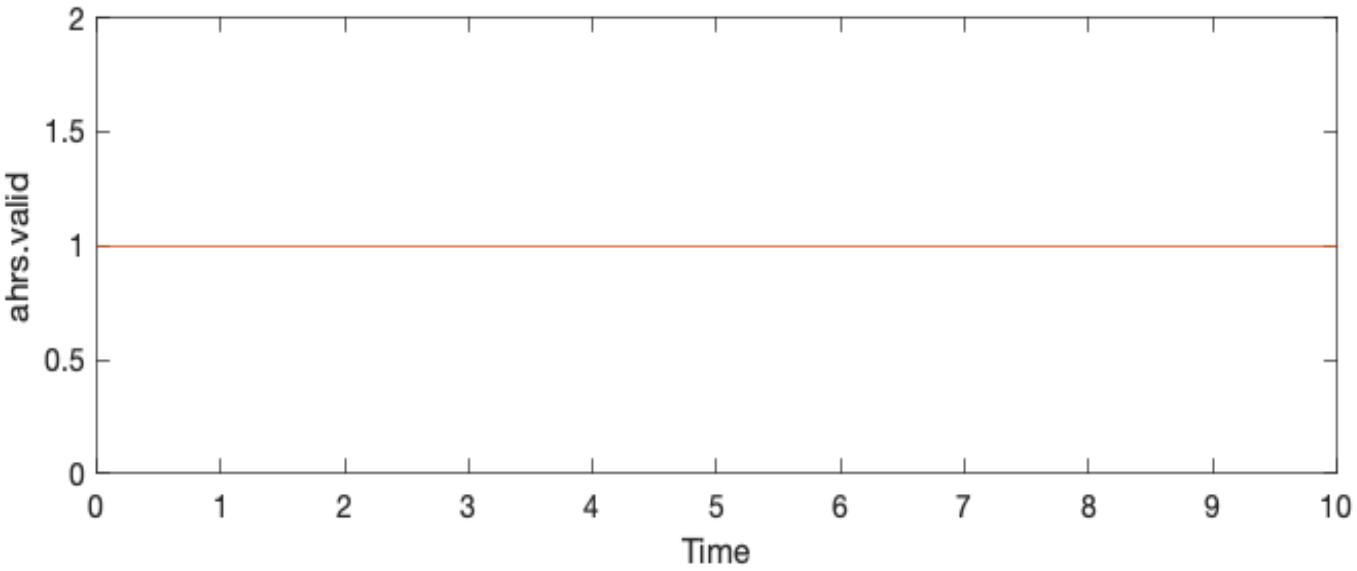
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.p	double	deg/sec	0.01	zoh	union
ahrs.r	double	deg/sec	0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.valid	boolean		0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Simulation Error:

Input argument #1 is an invalid cvdata object. CVDATA objects become invalid when their associated models are closed or modified

[Back to Report Summary](#)

Custom Criteria Result Information

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:

0.881883992650967

Minimum Value (Inclusive):

0.6300000000000000

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

0.992909582950096

Maximum Value (Inclusive):

1.1000000000000000

Diagnostic Record:

Outcome: Passed

Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:

0.985486744763096

Minimum Value (Inclusive):

0.9500000000000000

Diagnostic Record:

Outcome: Passed

Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

0.992909582950096

Maximum Value (Inclusive):

1.0500000000000000

SmallNegativeStep

Test Result Information

Result Type: Test Case Result
Parent: [Helicopter Pitch Control Test](#)
Start Time: 13-Mar-2023 17:51:29
End Time: 13-Mar-2023 17:52:40
Outcome: **Failed**
Cause of Failure: **Errors running test case**
Description:

Pitch step of -1 degree to determine tracking, overshoot and rise time.

Test Case Information

Name: SmallNegativeStep
Type: Simulation Test

Test Case Requirements

Description: SR_6 Attitude Rate Tracking Performance
Document: HelicopterSystemRequirements.slreqx

Simulation

System Under Test Information

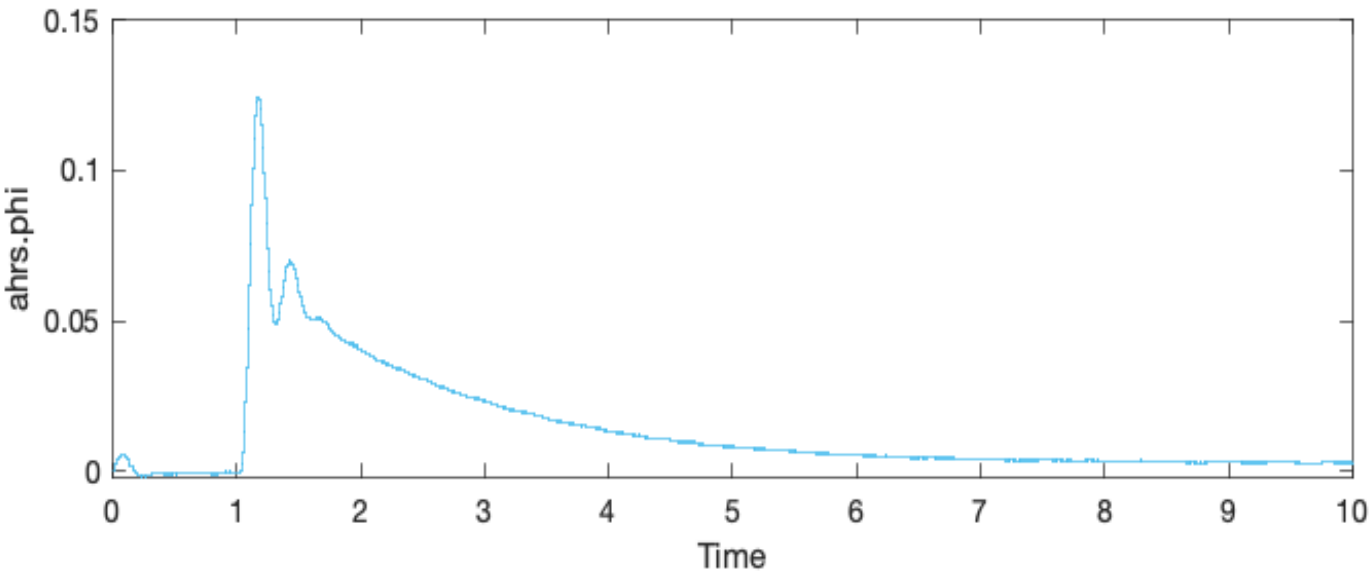
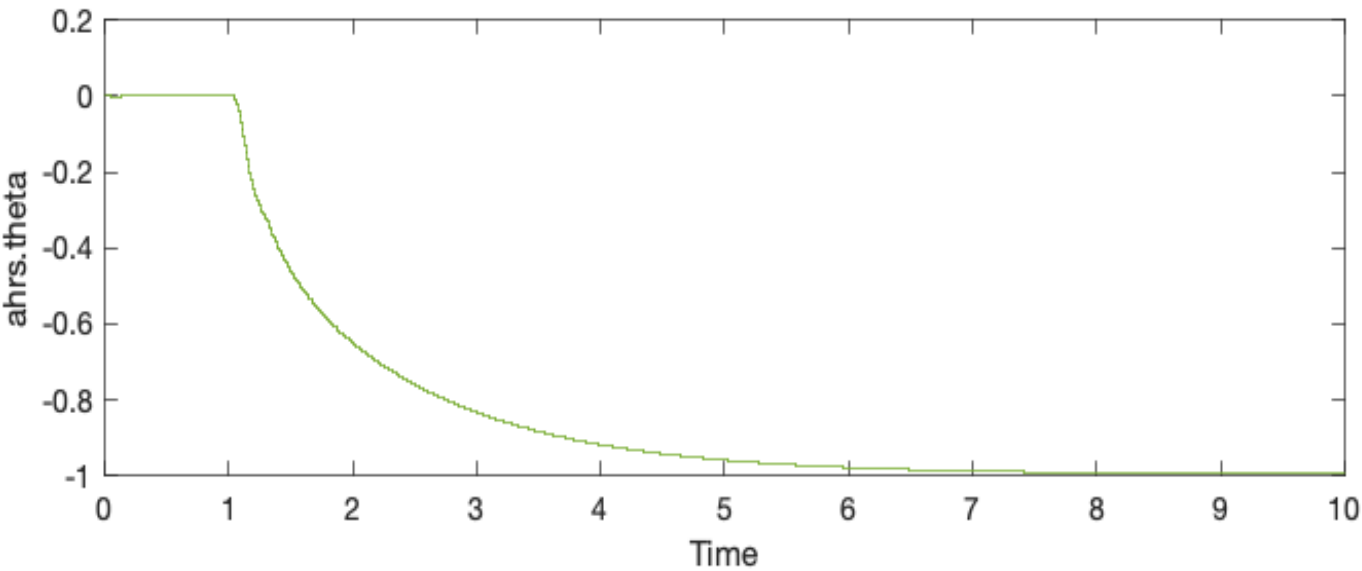
Model: HelicopterSystem
 Release: Current
 Simulation Mode: normal
 Override SIL or PIL Mode: 0
 Configuration Set: Configuration
 Start Time: 0
 Stop Time: 10
 Checksum: 1537542357 1654829112 2870649001 2292590244
 Simulink Version: 10.4
 Model Version: 1.24
 Model Author: bpotter
 Date: Mon May 11 15:42:30 2020
 User ID: halilceylan
 Model Path: /Users/halilceylan/Desktop/AnSyMo-Simulink-Mutator/matlab_workspace/heli/work/HelicopterSystem.slx
 Solver Name: ode23t
 Solver Type: Variable-Step
 Max Step Size: 0.001
 Simulation Start Time: 2023-03-13 17:51:29
 Simulation Stop Time: 2023-03-13 17:52:38
 Platform: MACI64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
ahrs.theta	double	deg	0.01	zoh	union	Link
ahrs.phi	double	deg	0.01	zoh	union	Link
ahrs.psi	double	deg	0.01	zoh	union	Link
ahrs.q	double	deg/sec	0.01	zoh	union	Link
ahrs.p	double	deg/sec	0.01	zoh	union	Link
ahrs.r	double	deg/sec	0.01	zoh	union	Link
ahrs.valid	boolean		0.01	zoh	union	Link

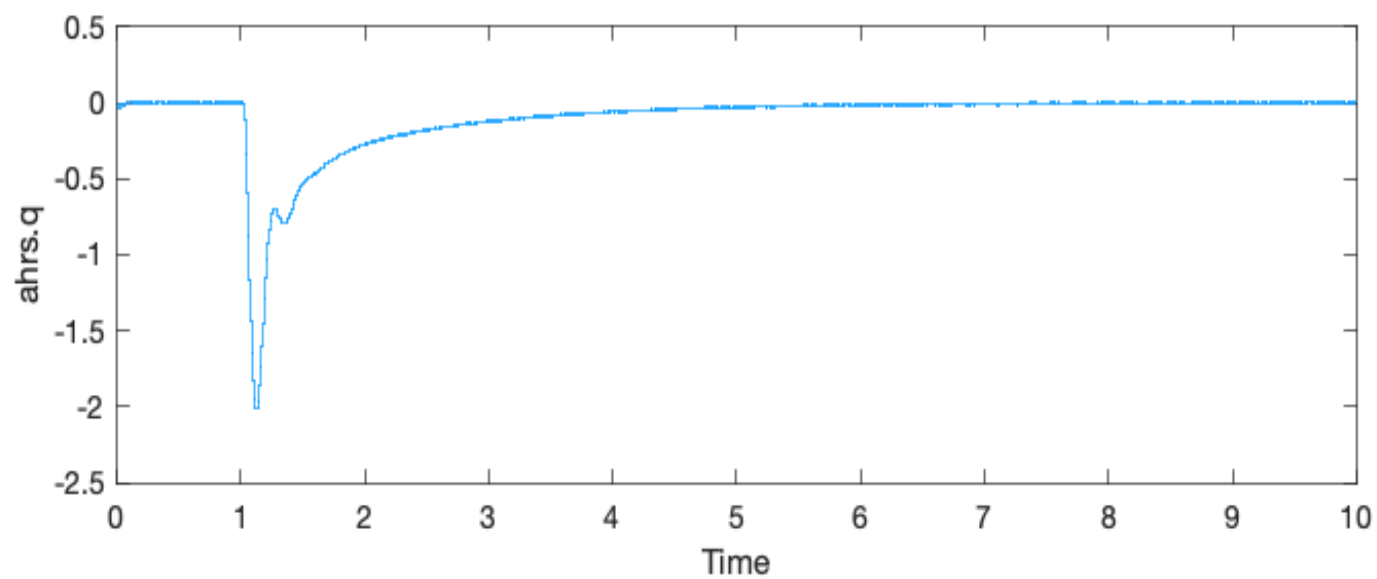
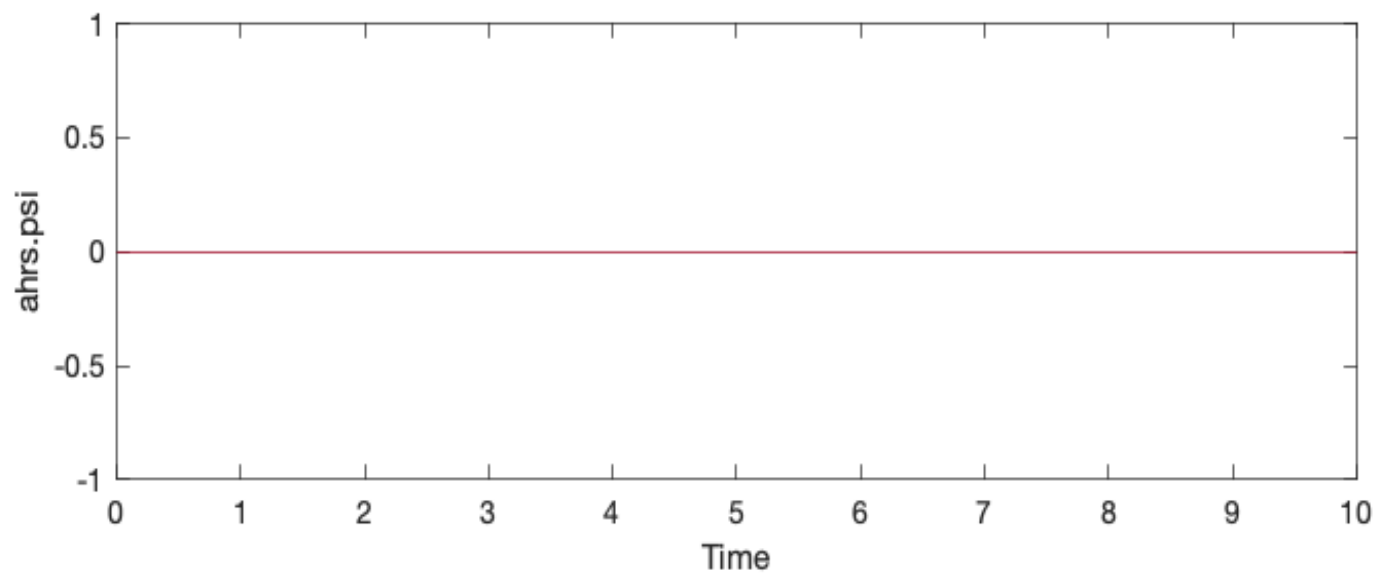
Name	Data Type	Units	Sample Time	Interp	Sync
------	-----------	-------	-------------	--------	------

ahrs.theta	double	deg	0.01	zoh	union
ahrs.phi	double	deg	0.01	zoh	union



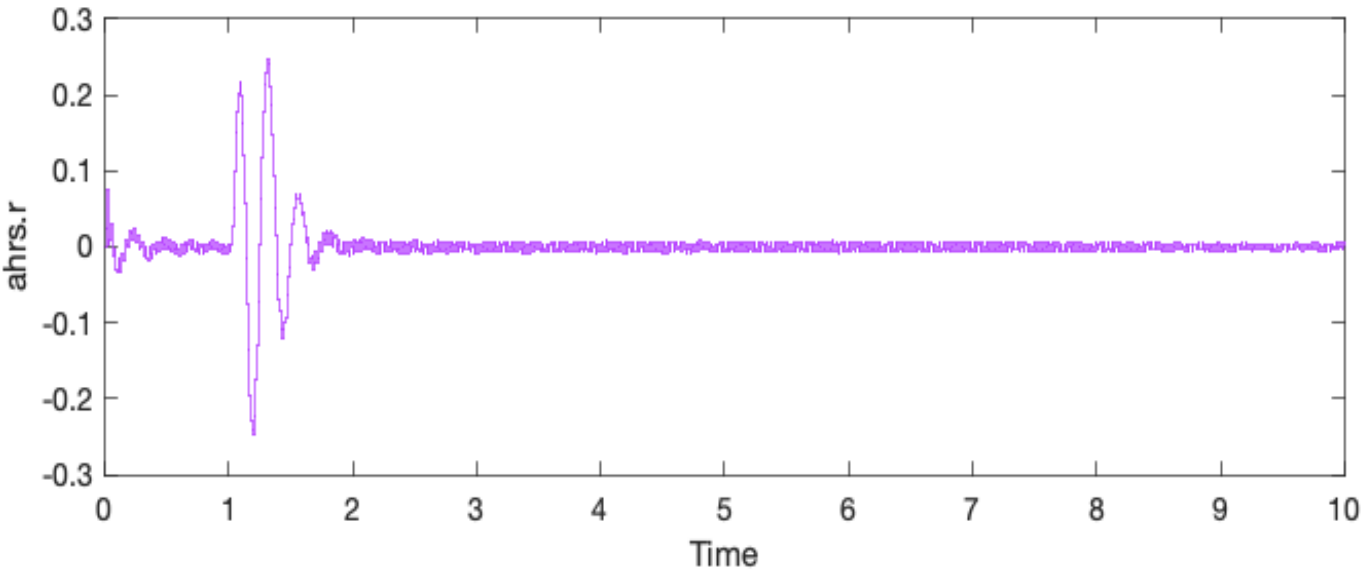
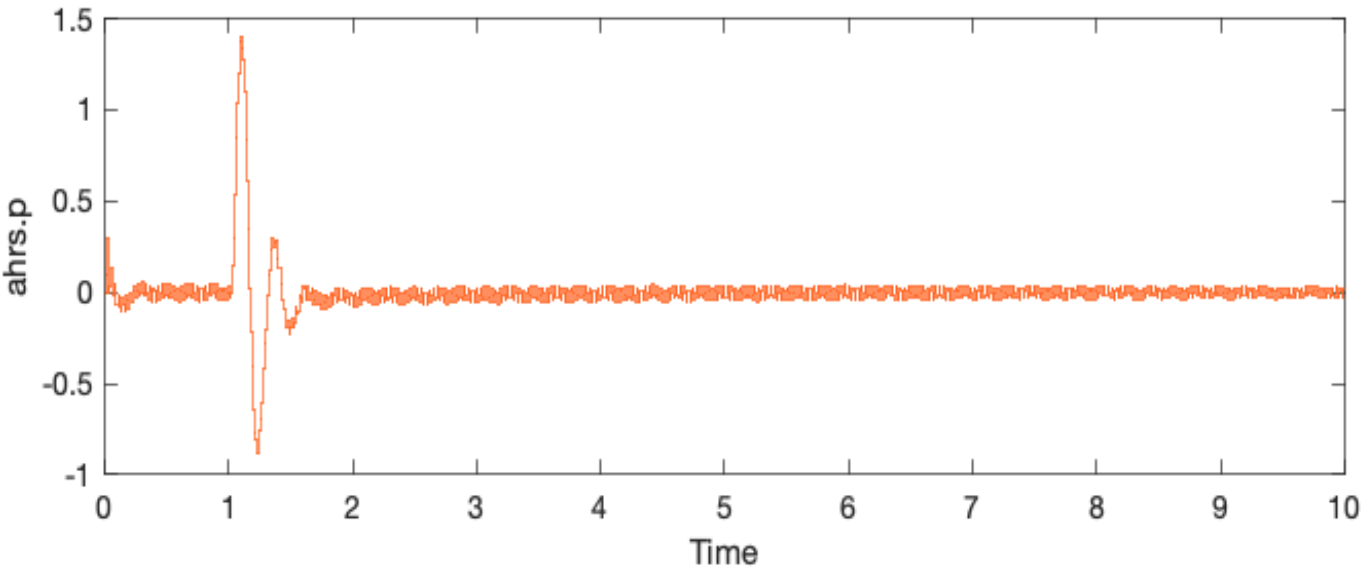
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.psi	double	deg	0.01	zoh	union
ahrs.q	double	deg/sec	0.01	zoh	union



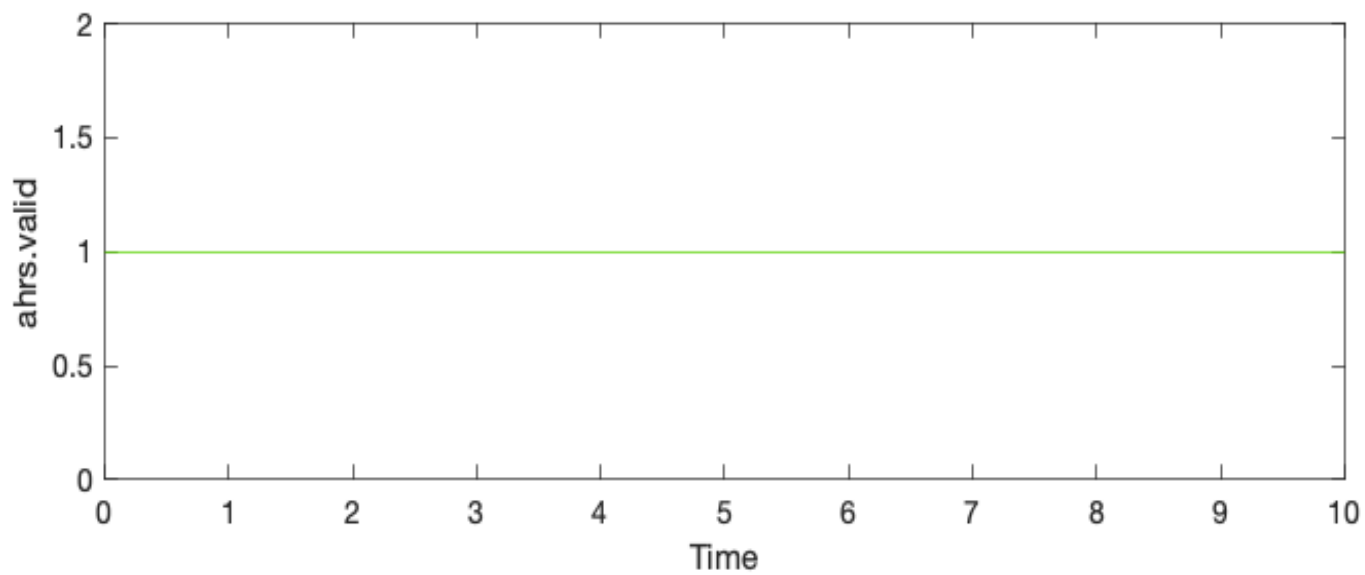
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.p	double	deg/sec	0.01	zoh	union
ahrs.r	double	deg/sec	0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.valid	boolean		0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Simulation Error:

Input argument #1 is an invalid cvdata object. CVDATA objects become invalid when their associated models are closed or modified

[Back to Report Summary](#)

Custom Criteria Result Information

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

-0.882597437418119

Maximum Value (Inclusive):

-0.6300000000000000

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:
-0.993778249235710
Minimum Value (Inclusive):
-1.1000000000000000

Diagnostic Record:
Outcome: Passed
Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:
-0.993778249235710
Minimum Value (Inclusive):
-1.0500000000000000

Diagnostic Record:
Outcome: Passed
Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

-0.986242399130543
Maximum Value (Inclusive):
-0.9500000000000000

Helicopter Roll Control Test

Test Result Information

Result Type: Test Suite Result
Parent: [HeliLoopTest](#)
Start Time: 13-Mar-2023 17:52:40
End Time: 13-Mar-2023 17:55:04
Outcome: Total: 2, **Failed: 2**

Test Suite Information

Name: Helicopter Roll Control Test
[Back to Report Summary](#)

SmallPositiveStep

Test Result Information

Result Type: Test Case Result
Parent: [Helicopter Roll Control Test](#)
Start Time: 13-Mar-2023 17:52:40
End Time: 13-Mar-2023 17:53:53
Outcome: **Failed**
Cause of Failure: **Errors running test case**
Description:

Roll step of +1 degree to determine tracking, overshoot and rise time.

Test Case Information

Name: SmallPositiveStep

Type: Simulation Test

Test Case Requirements

Description: SR_6 Attitude Rate Tracking Performance

Document: HelicopterSystemRequirements.slreqx

Simulation

System Under Test Information

Model: HelicopterSystem

Release: Current

Simulation Mode: normal

Override SIL or PIL 0

Mode:

Configuration Set: Configuration

Start Time: 0

Stop Time: 10

Checksum: 1537542357 1654829112 2870649001 2292590244

Simulink Version: 10.4

Model Version: 1.24

Model Author: bpotter

Date: Mon May 11 15:42:30 2020

User ID: halilceylan

Model Path: /Users/halilceylan/Desktop/AnSyMo-Simulink-Mutator/matlab_workspace/heli/work/HelicopterSystem.slx

Solver Name: ode23t

Solver Type: Variable-Step

Max Step Size: 0.001

Simulation Start Time: 2023-03-13 17:52:40

Simulation Stop Time: 2023-03-13 17:53:50

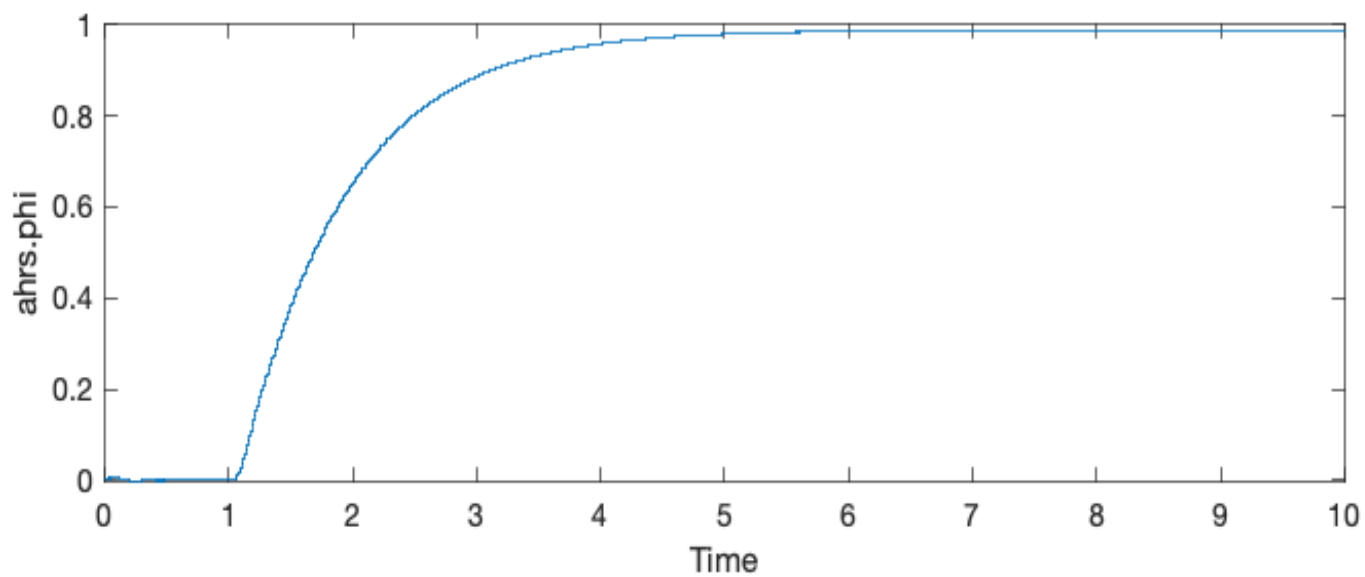
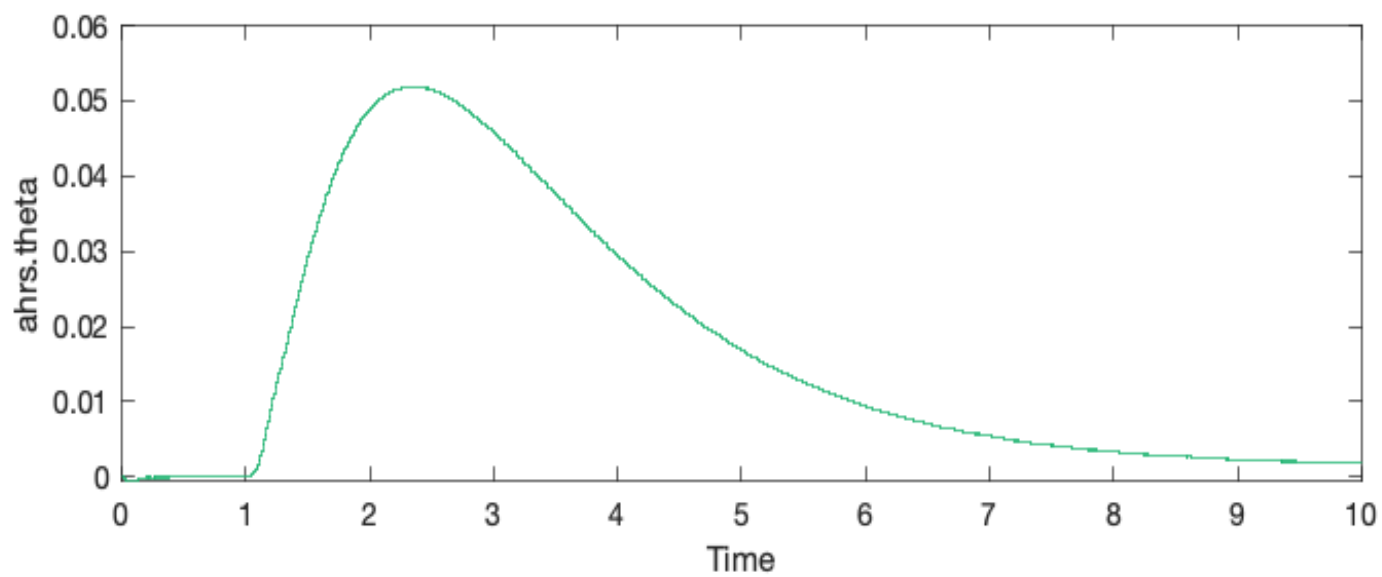
Platform: MACI64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
------	-----------	-------	-------------	--------	------	--------------

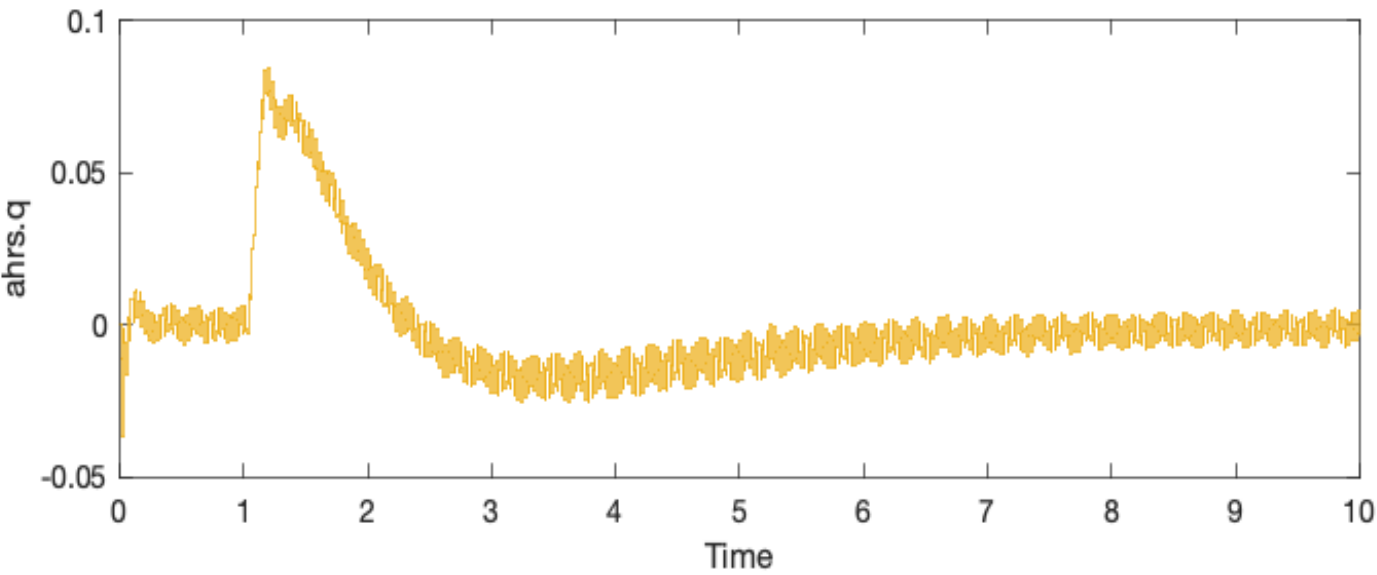
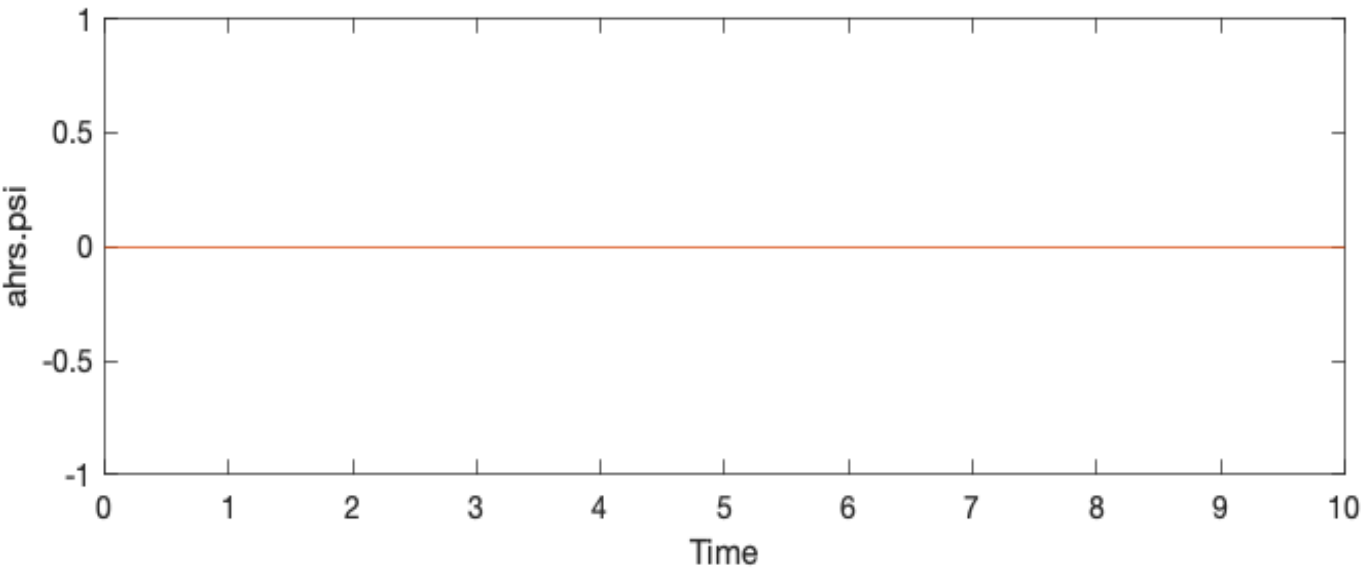
ahrs.theta	double	deg	0.01	zoh	union	Link
ahrs.phi	double	deg	0.01	zoh	union	Link
ahrs.psi	double	deg	0.01	zoh	union	Link
ahrs.q	double	deg/sec	0.01	zoh	union	Link
ahrs.p	double	deg/sec	0.01	zoh	union	Link
ahrs.r	double	deg/sec	0.01	zoh	union	Link
ahrs.valid	boolean		0.01	zoh	union	Link

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.theta	double	deg	0.01	zoh	union
ahrs.phi	double	deg	0.01	zoh	union



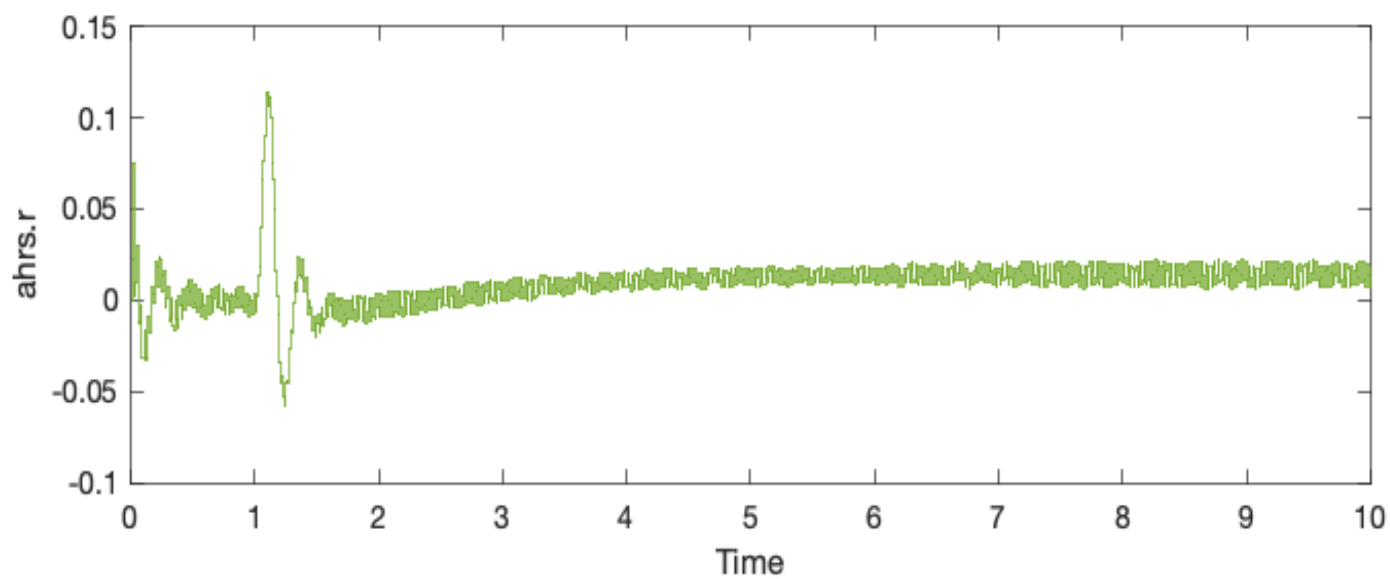
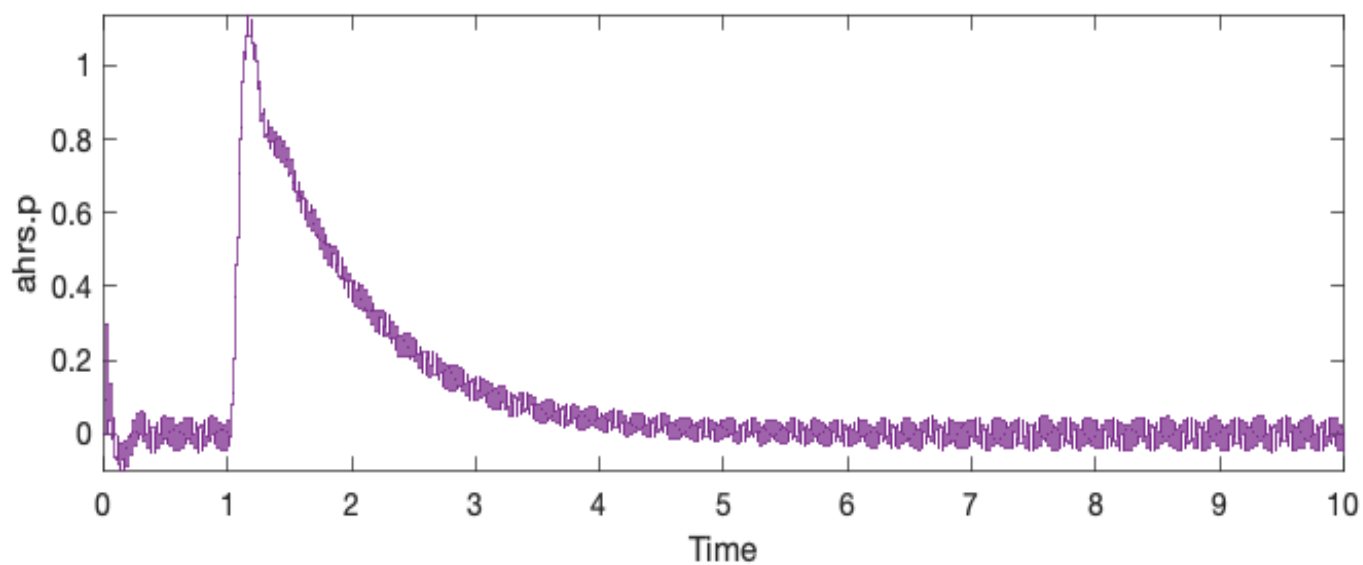
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.psi	double	deg	0.01	zoh	union
ahrs.q	double	deg/sec	0.01	zoh	union



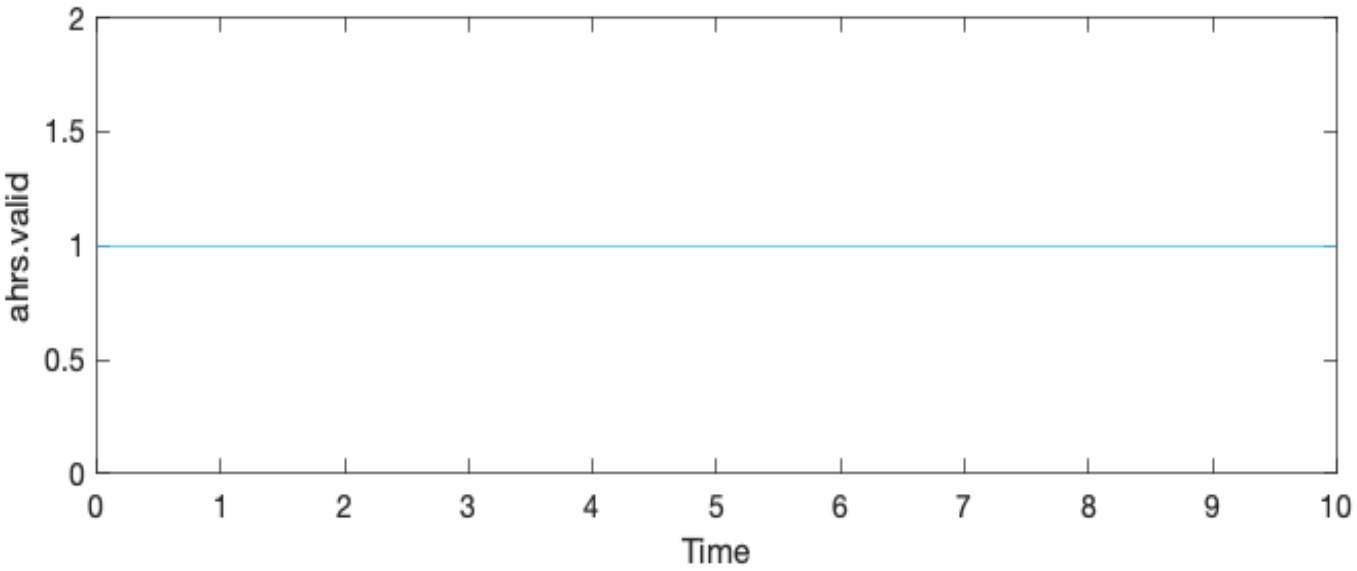
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.p	double	deg/sec	0.01	zoh	union
ahrs.r	double	deg/sec	0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.valid	boolean		0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Simulation Error:

Input argument #1 is an invalid cvdata object. CVDATA objects become invalid when their associated models are closed or modified

[Back to Report Summary](#)

Custom Criteria Result Information

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:

0.933887104401271

Minimum Value (Inclusive):

0.6300000000000000

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

0.988871630368765

Maximum Value (Inclusive):

1.1000000000000000

Diagnostic Record:

Outcome: Passed

Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:

0.987742217227980

Minimum Value (Inclusive):

0.9500000000000000

Diagnostic Record:

Outcome: Passed

Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

0.988871630368765

Maximum Value (Inclusive):

1.0500000000000000

SmallNegativeStep

Test Result Information

Result Type: Test Case Result
Parent: [Helicopter Roll Control Test](#)
Start Time: 13-Mar-2023 17:53:53
End Time: 13-Mar-2023 17:55:04
Outcome: **Failed**
Cause of Failure: **Errors running test case**
Description:

Roll step of -1 degree to determine tracking, overshoot and rise time.

Test Case Information

Name: SmallNegativeStep
Type: Simulation Test

Test Case Requirements

Description: SR_6 Attitude Rate Tracking Performance
Document: HelicopterSystemRequirements.slreqx

Simulation

System Under Test Information

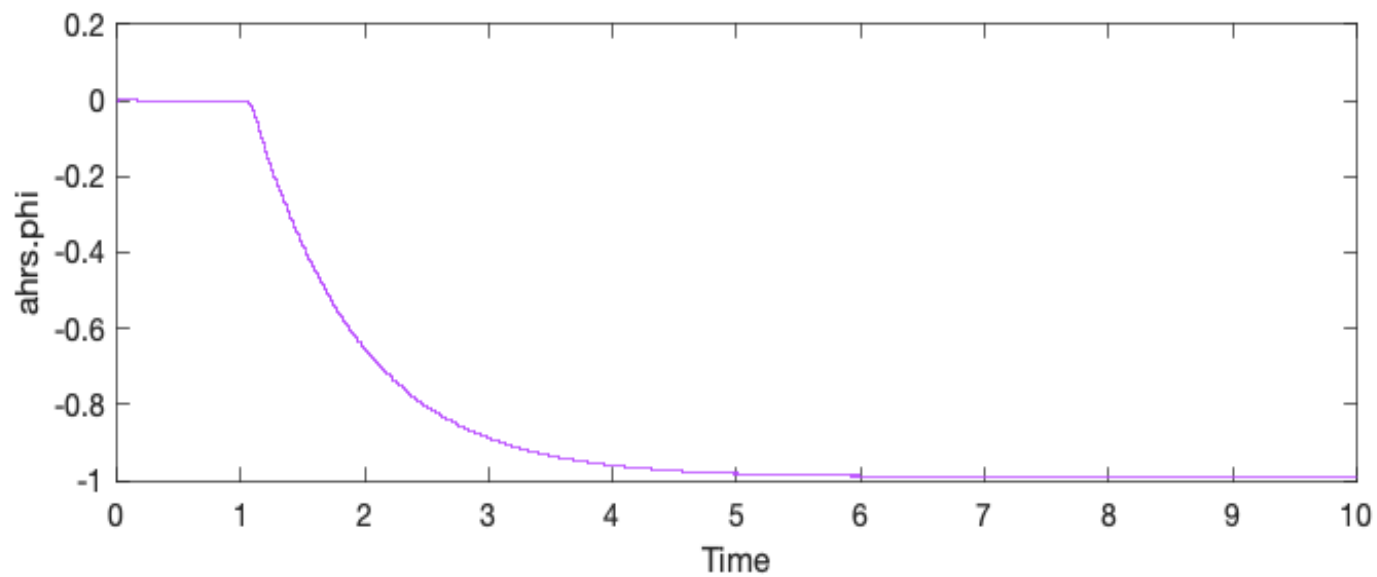
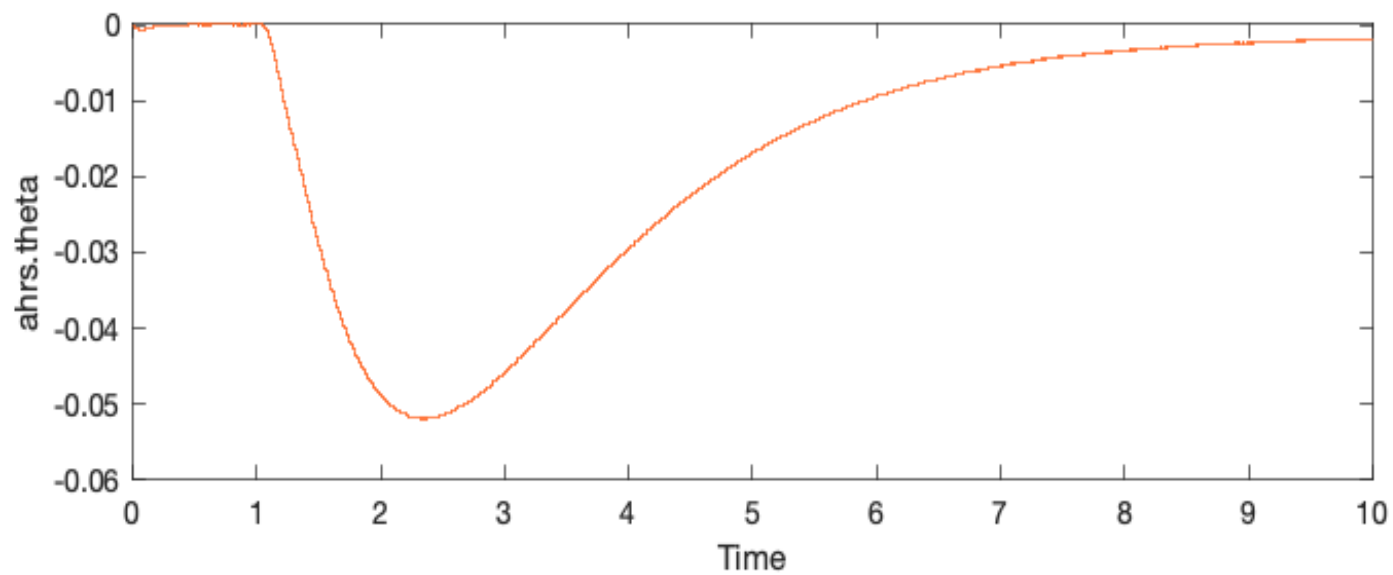
Model: HelicopterSystem
 Release: Current
 Simulation Mode: normal
 Override SIL or PIL Mode: 0
 Configuration Set: Configuration
 Start Time: 0
 Stop Time: 10
 Checksum: 1537542357 1654829112 2870649001 2292590244
 Simulink Version: 10.4
 Model Version: 1.24
 Model Author: bpotter
 Date: Mon May 11 15:42:30 2020
 User ID: halilceylan
 Model Path: /Users/halilceylan/Desktop/AnSyMo-Simulink-Mutator/matlab_workspace/heli/work/HelicopterSystem.slx
 Solver Name: ode23t
 Solver Type: Variable-Step
 Max Step Size: 0.001
 Simulation Start Time: 2023-03-13 17:53:53
 Simulation Stop Time: 2023-03-13 17:55:02
 Platform: MACI64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
ahrs.theta	double	deg	0.01	zoh	union	Link
ahrs.phi	double	deg	0.01	zoh	union	Link
ahrs.psi	double	deg	0.01	zoh	union	Link
ahrs.q	double	deg/sec	0.01	zoh	union	Link
ahrs.p	double	deg/sec	0.01	zoh	union	Link
ahrs.r	double	deg/sec	0.01	zoh	union	Link
ahrs.valid	boolean		0.01	zoh	union	Link

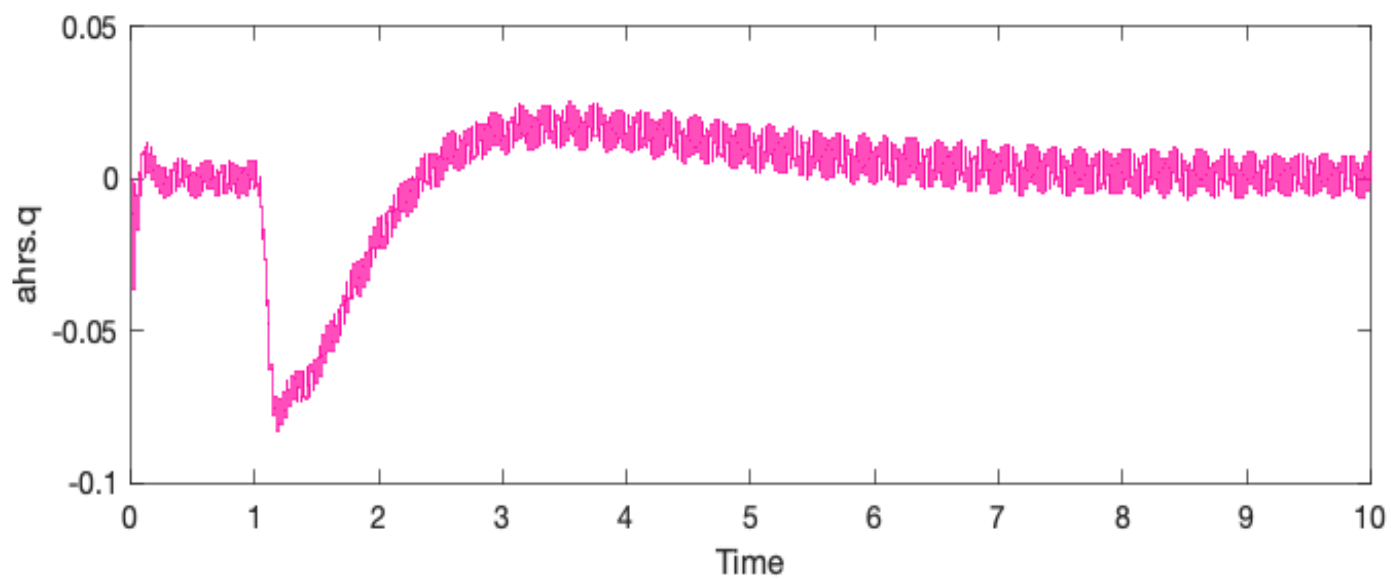
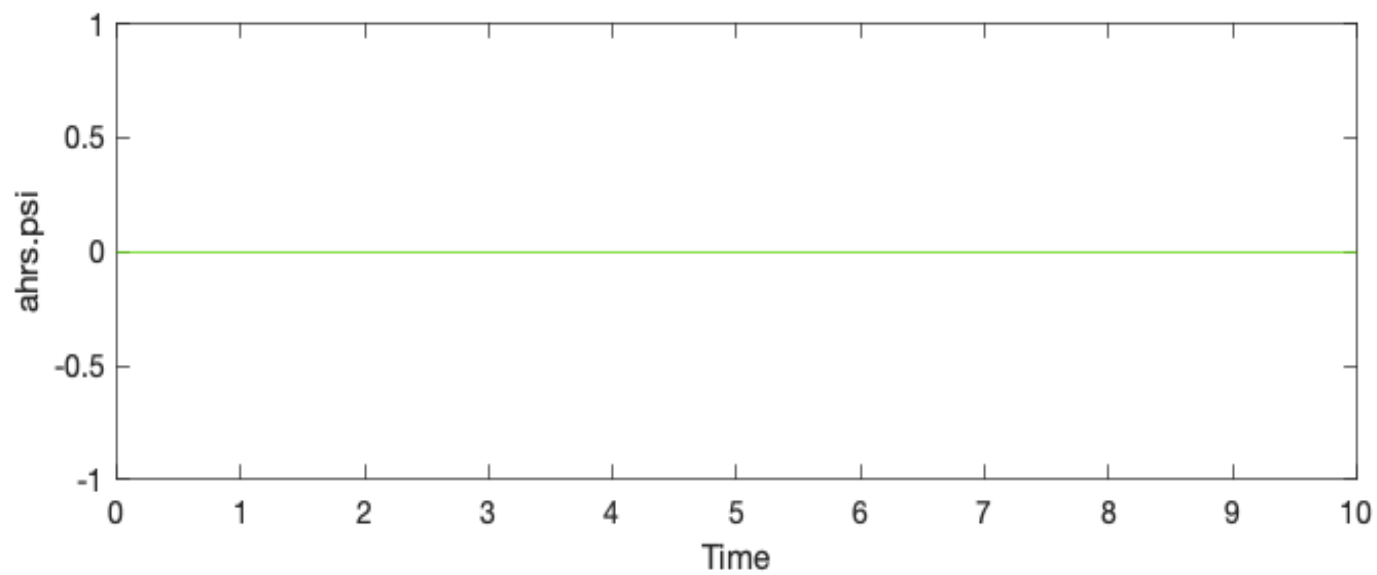
Name	Data Type	Units	Sample Time	Interp	Sync
------	-----------	-------	-------------	--------	------

ahrs.theta	double	deg	0.01	zoh	union
ahrs.phi	double	deg	0.01	zoh	union



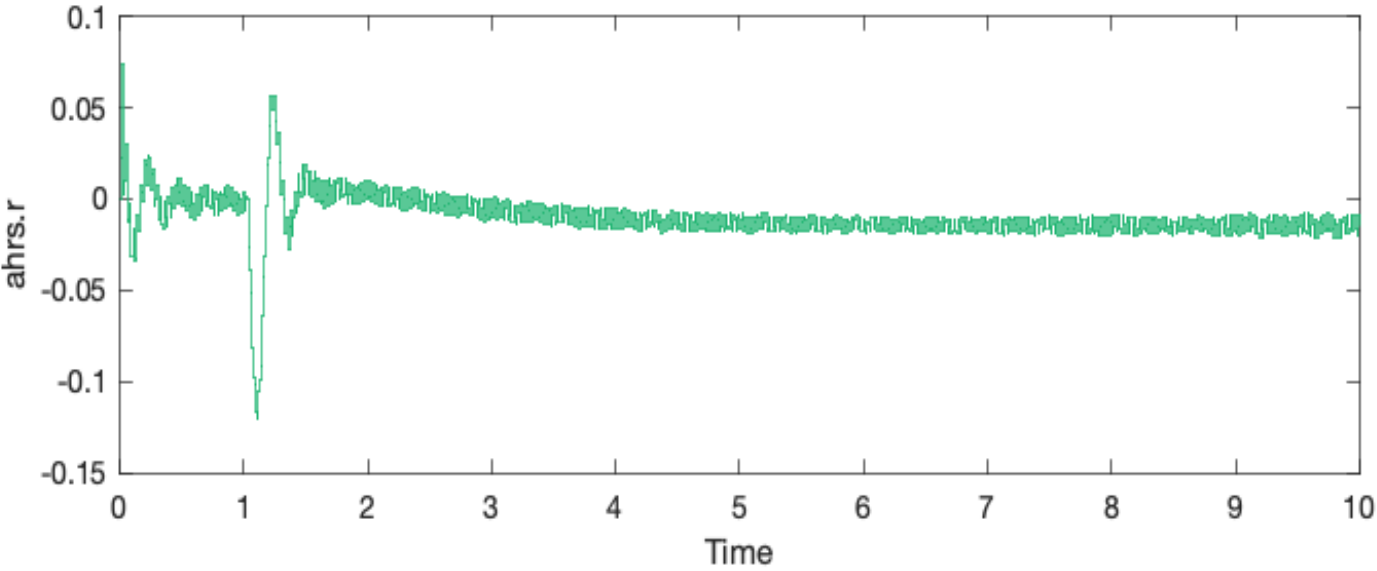
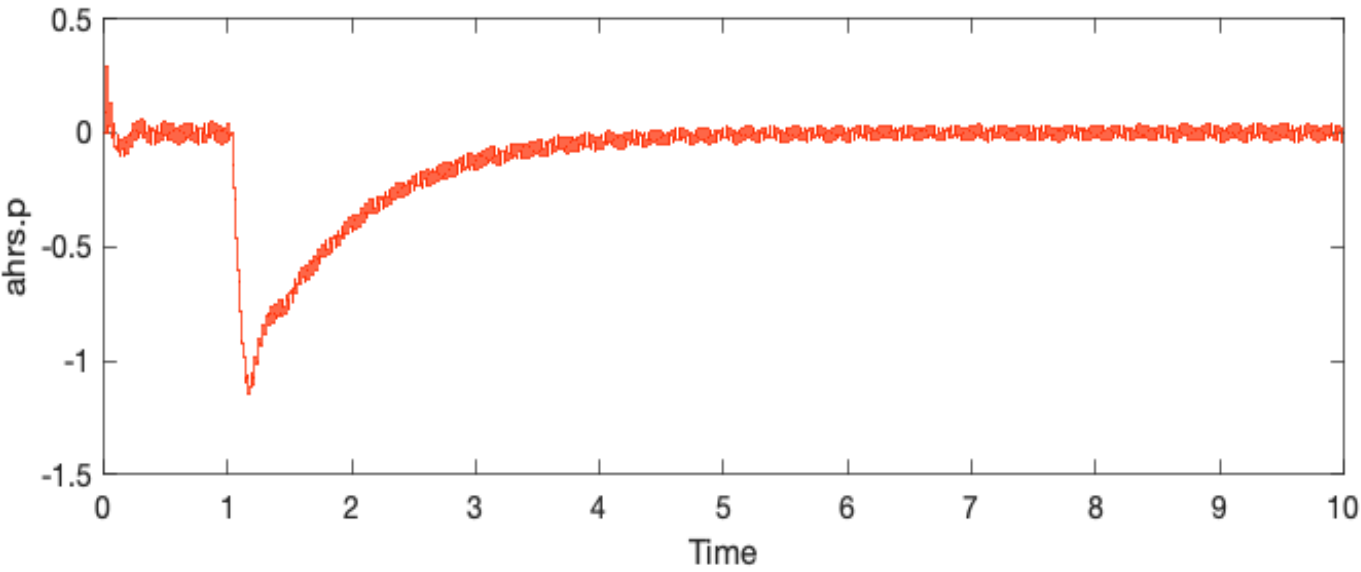
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.psi	double	deg	0.01	zoh	union
ahrs.q	double	deg/sec	0.01	zoh	union



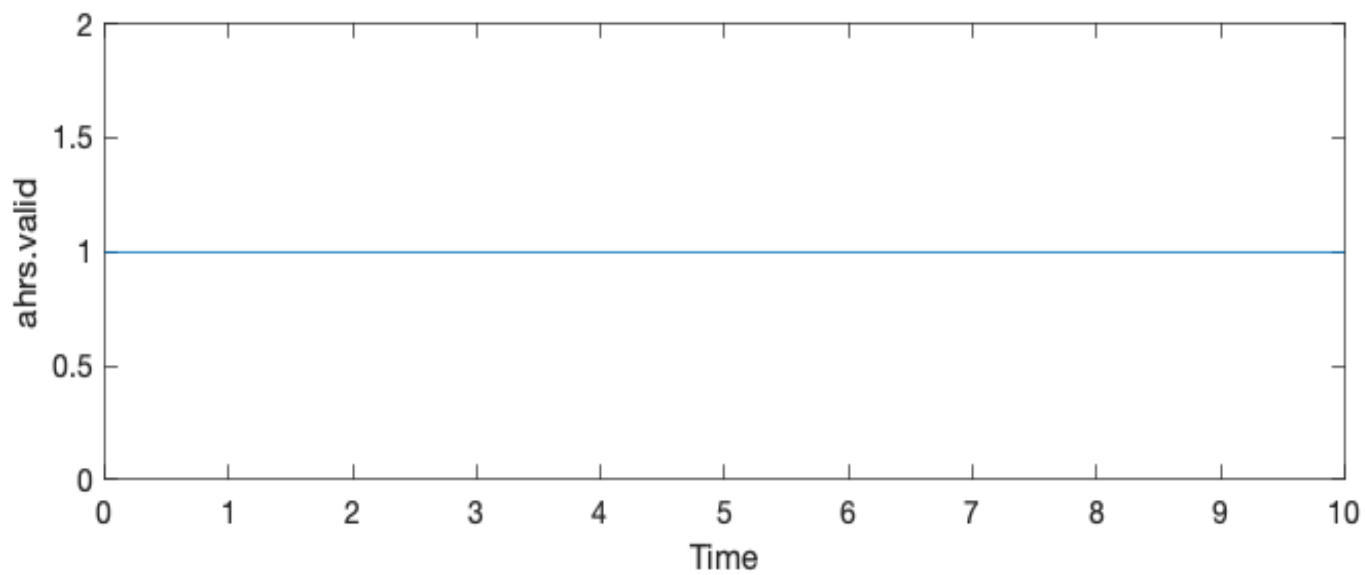
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.p	double	deg/sec	0.01	zoh	union
ahrs.r	double	deg/sec	0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.valid	boolean		0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Simulation Error:

Input argument #1 is an invalid cvdata object. CVDATA objects become invalid when their associated models are closed or modified

[Back to Report Summary](#)

Custom Criteria Result Information

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

-0.934684959248688

Maximum Value (Inclusive):

-0.6300000000000000

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:
-0.989788536394629
Minimum Value (Inclusive):
-1.1000000000000000

Diagnostic Record:
Outcome: Passed
Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:
-0.989788536394629
Minimum Value (Inclusive):
-1.0500000000000000

Diagnostic Record:
Outcome: Passed
Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

-0.988615869911273
Maximum Value (Inclusive):
-0.9500000000000000

Helicopter Yaw Control Test

Test Result Information

Result Type:	Test Suite Result
Parent:	HeliLoopTest
Start Time:	13-Mar-2023 17:55:04
End Time:	13-Mar-2023 17:57:31
Outcome:	Total: 2, Failed: 2

Test Suite Information

Name: Helicopter Yaw Control Test
[Back to Report Summary](#)

SmallPositiveStep

Test Result Information

Result Type:	Test Case Result
Parent:	Helicopter Yaw Control Test
Start Time:	13-Mar-2023 17:55:04
End Time:	13-Mar-2023 17:56:18
Outcome:	Failed
Cause of Failure:	Errors running test case
Description:	

Yaw step of +1 degree/sec to determine tracking, overshoot and rise time.

Test Case Information

Name: SmallPositiveStep

Type: Simulation Test

Test Case Requirements

Description: SR_6 Attitude Rate Tracking Performance

Document: HelicopterSystemRequirements.slreqx

Simulation

System Under Test Information

Model: HelicopterSystem

Release: Current

Simulation Mode: normal

Override SIL or PIL: 0

Mode:

Configuration Set: Configuration

Start Time: 0

Stop Time: 10

Checksum: 1537542357 1654829112 2870649001 2292590244

Simulink Version: 10.4

Model Version: 1.24

Model Author: bpotter

Date: Mon May 11 15:42:30 2020

User ID: halilceylan

Model Path: /Users/halilceylan/Desktop/AnSyMo-Simulink-Mutator/matlab_workspace/heli/work/HelicopterSystem.slx

Solver Name: ode23t

Solver Type: Variable-Step

Max Step Size: 0.001

Simulation Start Time: 2023-03-13 17:55:04

Simulation Stop Time: 2023-03-13 17:56:15

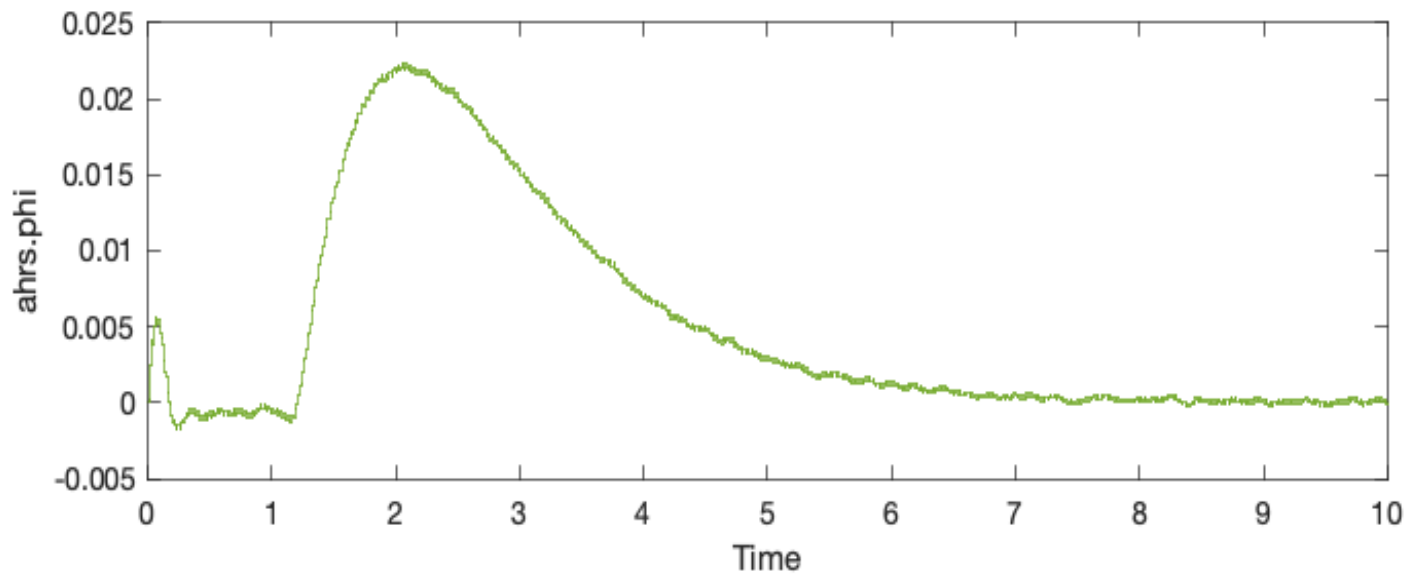
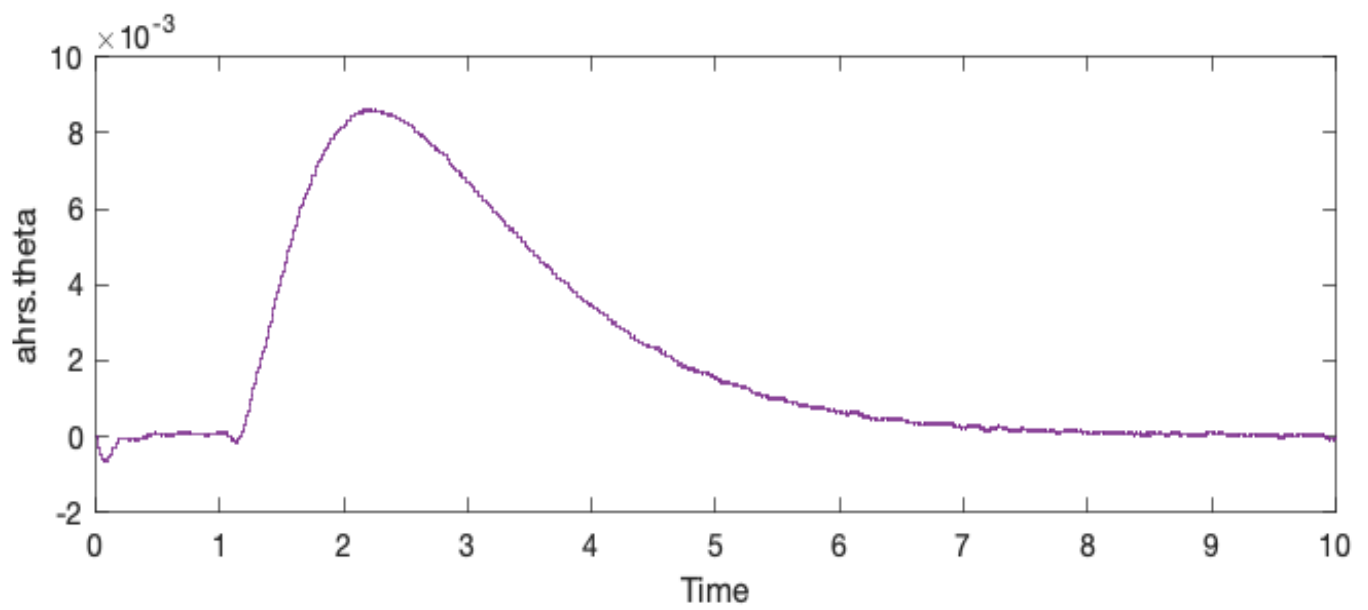
Platform: MACI64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
------	-----------	-------	-------------	--------	------	--------------

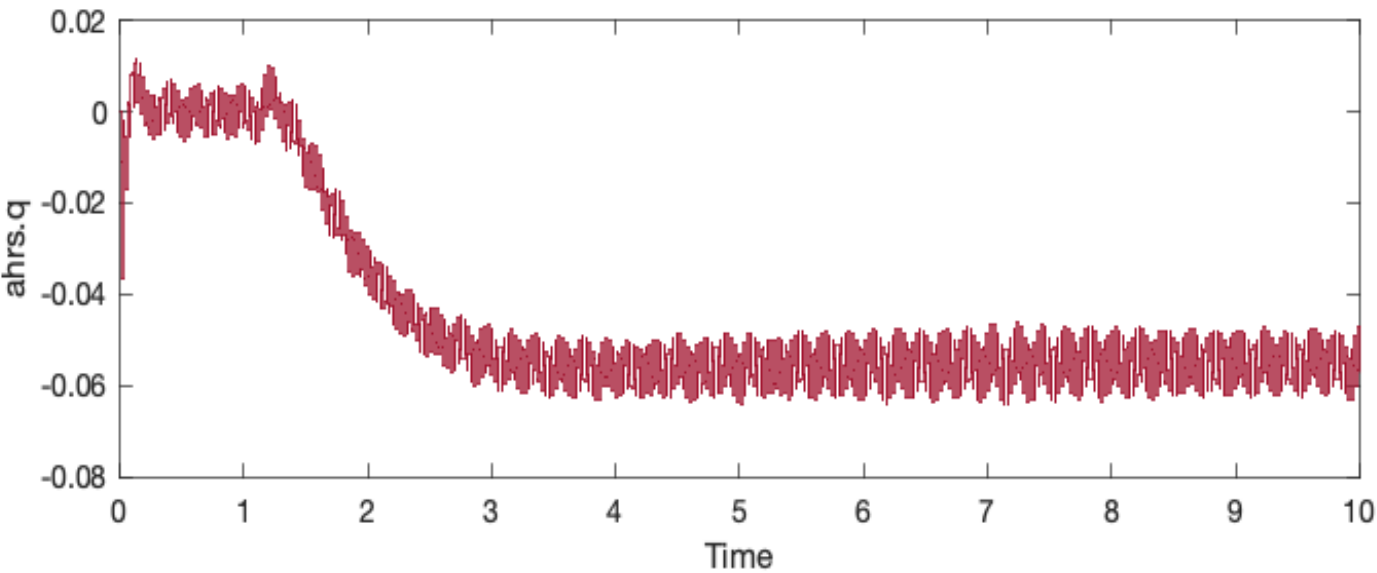
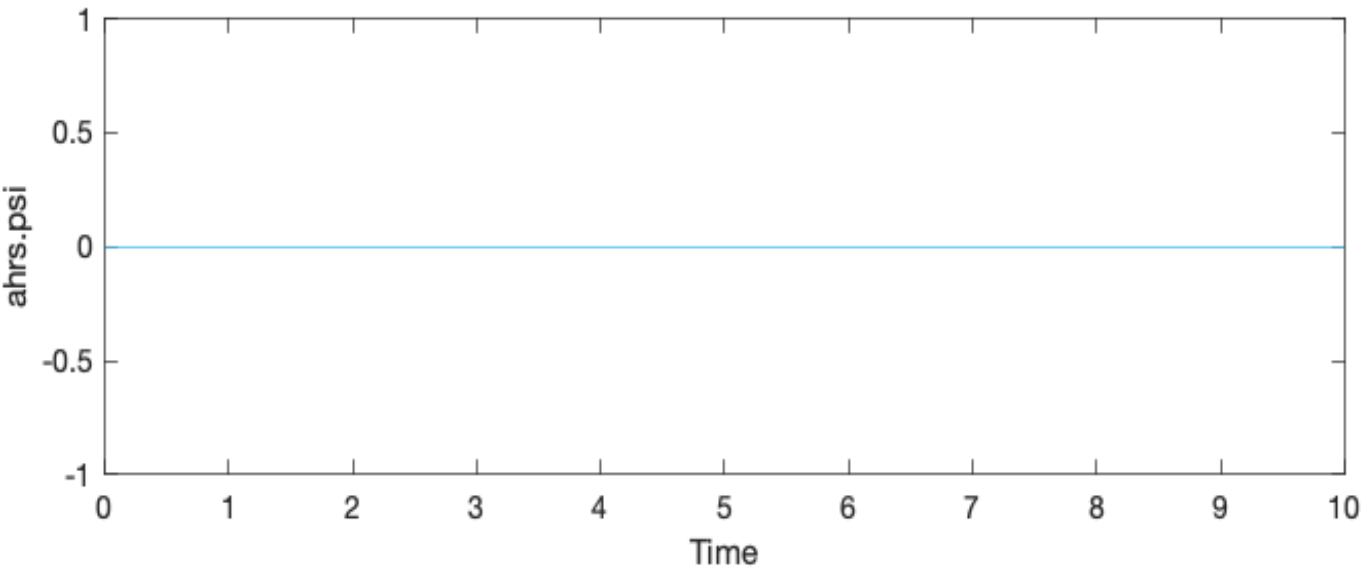
ahrs.theta	double	deg	0.01	zoh	union	Link
ahrs.phi	double	deg	0.01	zoh	union	Link
ahrs.psi	double	deg	0.01	zoh	union	Link
ahrs.q	double	deg/sec	0.01	zoh	union	Link
ahrs.p	double	deg/sec	0.01	zoh	union	Link
ahrs.r	double	deg/sec	0.01	zoh	union	Link
ahrs.valid	boolean		0.01	zoh	union	Link

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.theta	double	deg	0.01	zoh	union
ahrs.phi	double	deg	0.01	zoh	union



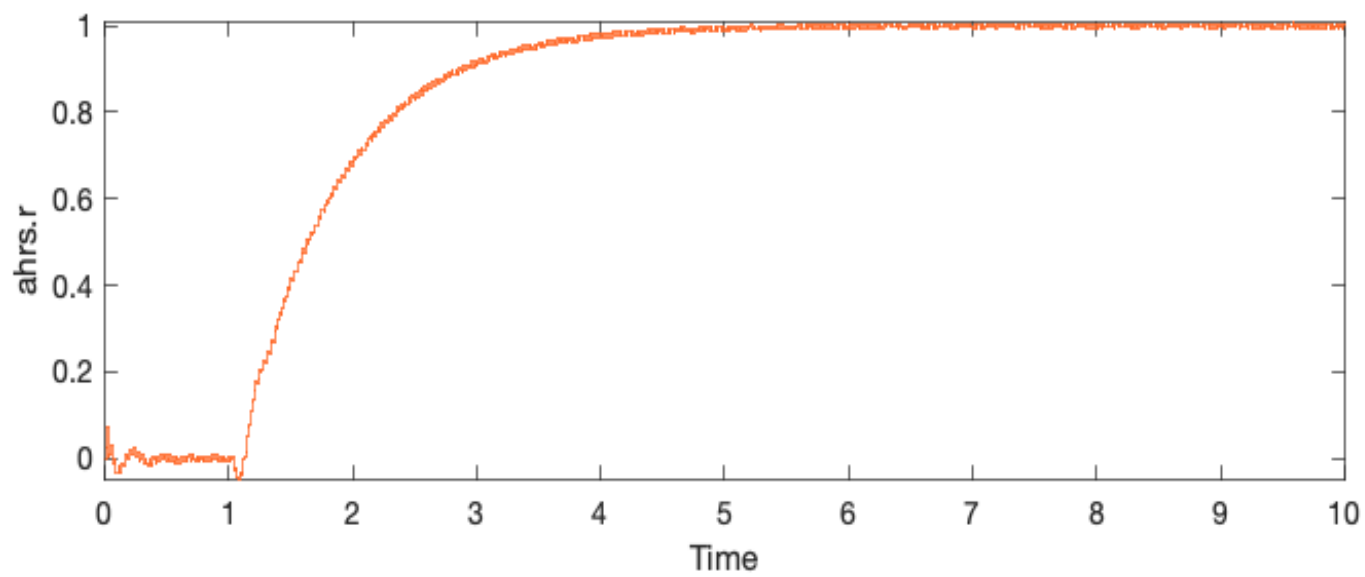
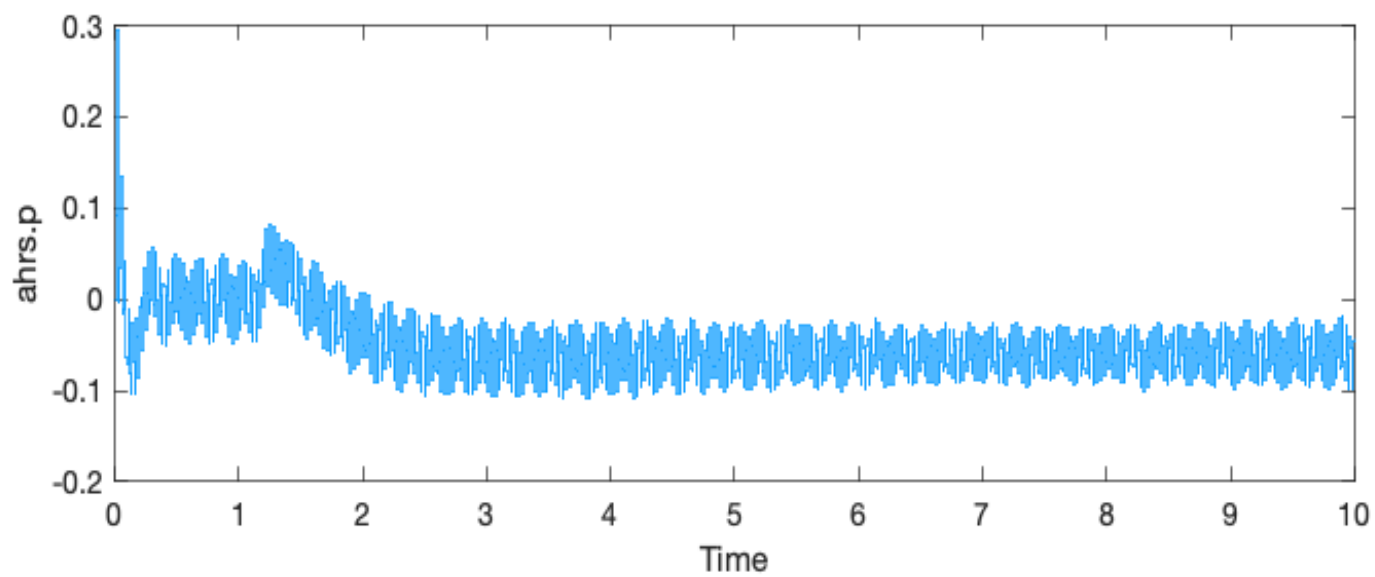
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.psi	double	deg	0.01	zoh	union
ahrs.q	double	deg/sec	0.01	zoh	union



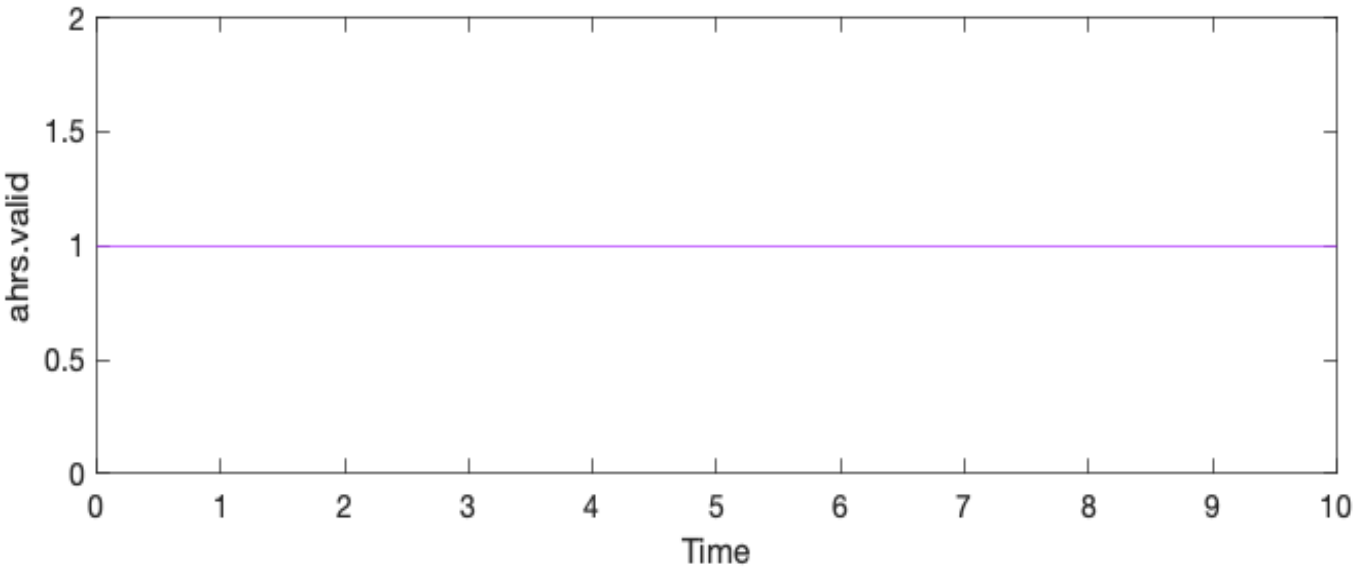
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.p	double	deg/sec	0.01	zoh	union
ahrs.r	double	deg/sec	0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.valid	boolean		0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Simulation Error:

Input argument #1 is an invalid cvdata object. CVDATA objects become invalid when their associated models are closed or modified

[Back to Report Summary](#)

Custom Criteria Result Information

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:

0.949767089376463

Minimum Value (Inclusive):

0.6300000000000000

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqualTo passed.

Actual Value:

1.006238215674025

Maximum Value (Inclusive):

1.1000000000000000

Diagnostic Record:

Outcome: Passed

Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqualTo passed.

Actual Value:

0.993349042507627

Minimum Value (Inclusive):

0.9500000000000000

Diagnostic Record:

Outcome: Passed

Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

1.006238215674025

Maximum Value (Inclusive):

1.0500000000000000

SmallNegativeStep

Test Result Information

Result Type: Test Case Result
Parent: [Helicopter Yaw Control Test](#)
Start Time: 13-Mar-2023 17:56:18
End Time: 13-Mar-2023 17:57:31
Outcome: **Failed**
Cause of Failure: **Errors running test case**
Description:

Yaw step of -1 degree/sec to determine tracking, overshoot and rise time.

Test Case Information

Name: SmallNegativeStep
Type: Simulation Test

Test Case Requirements

Description: SR_6 Attitude Rate Tracking Performance
Document: HelicopterSystemRequirements.slreqx

Simulation

System Under Test Information

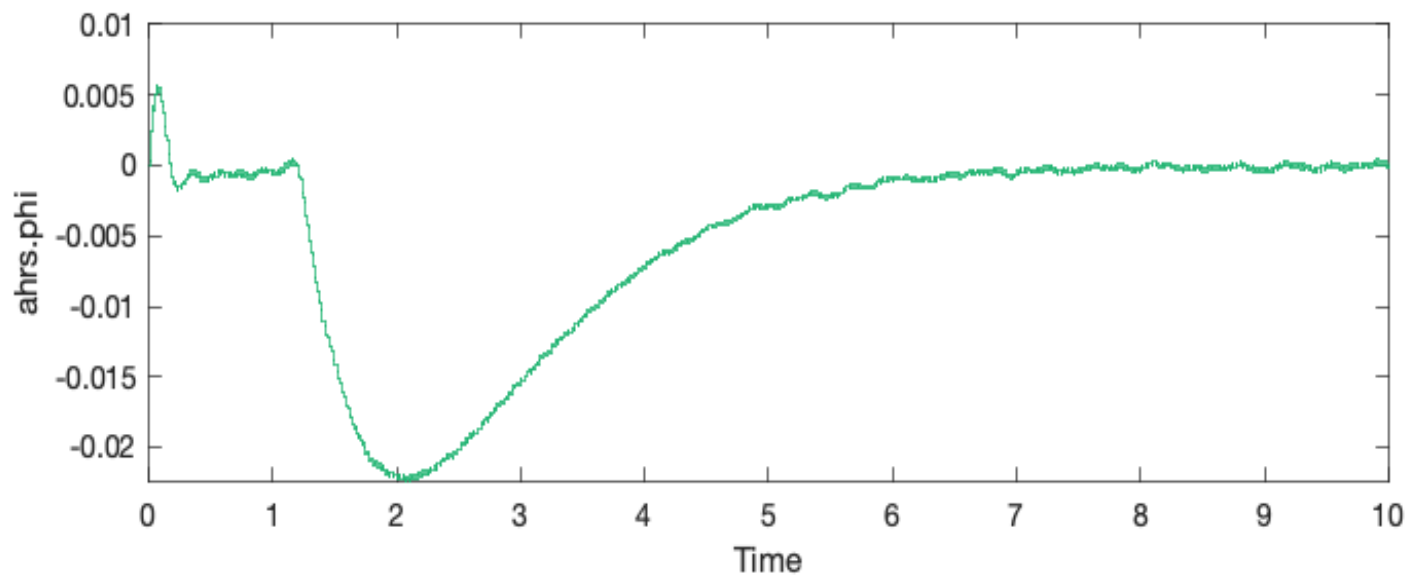
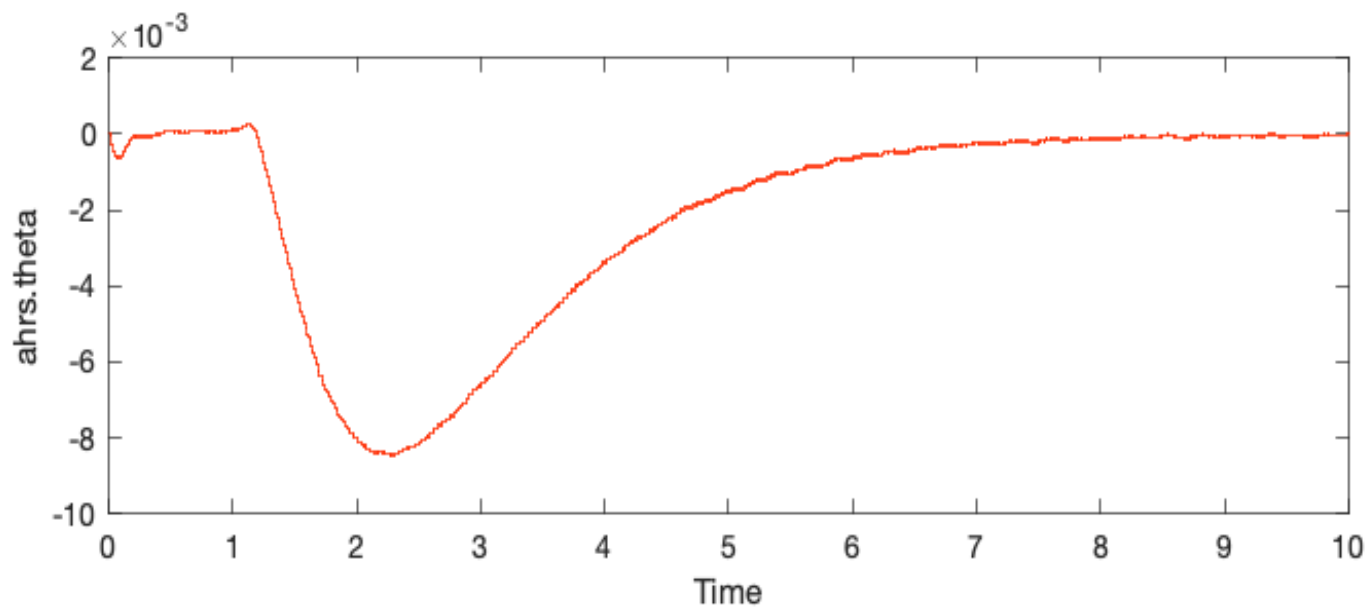
Model: HelicopterSystem
 Release: Current
 Simulation Mode: normal
 Override SIL or PIL Mode: 0
 Configuration Set: Configuration
 Start Time: 0
 Stop Time: 10
 Checksum: 1537542357 1654829112 2870649001 2292590244
 Simulink Version: 10.4
 Model Version: 1.24
 Model Author: bpotter
 Date: Mon May 11 15:42:30 2020
 User ID: halilceylan
 Model Path: /Users/halilceylan/Desktop/AnSyMo-Simulink-Mutator/matlab_workspace/heli/work/HelicopterSystem.slx
 Solver Name: ode23t
 Solver Type: Variable-Step
 Max Step Size: 0.001
 Simulation Start Time: 2023-03-13 17:56:18
 Simulation Stop Time: 2023-03-13 17:57:29
 Platform: MACI64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
ahrs.theta	double	deg	0.01	zoh	union	Link
ahrs.phi	double	deg	0.01	zoh	union	Link
ahrs.psi	double	deg	0.01	zoh	union	Link
ahrs.q	double	deg/sec	0.01	zoh	union	Link
ahrs.p	double	deg/sec	0.01	zoh	union	Link
ahrs.r	double	deg/sec	0.01	zoh	union	Link
ahrs.valid	boolean		0.01	zoh	union	Link

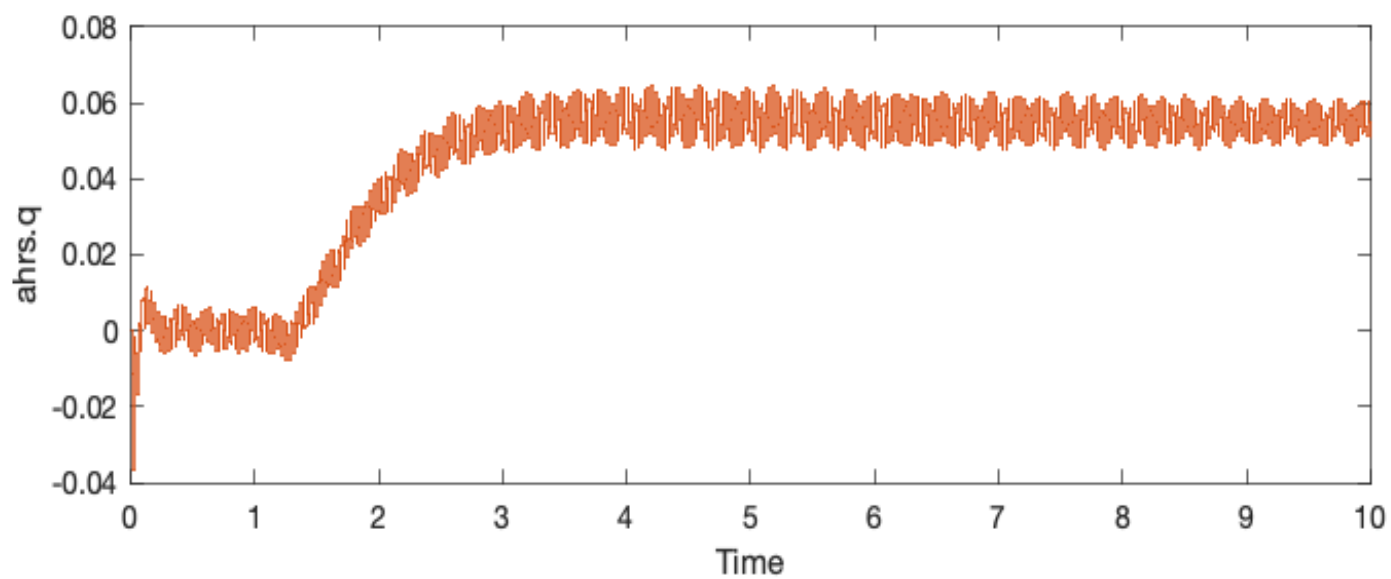
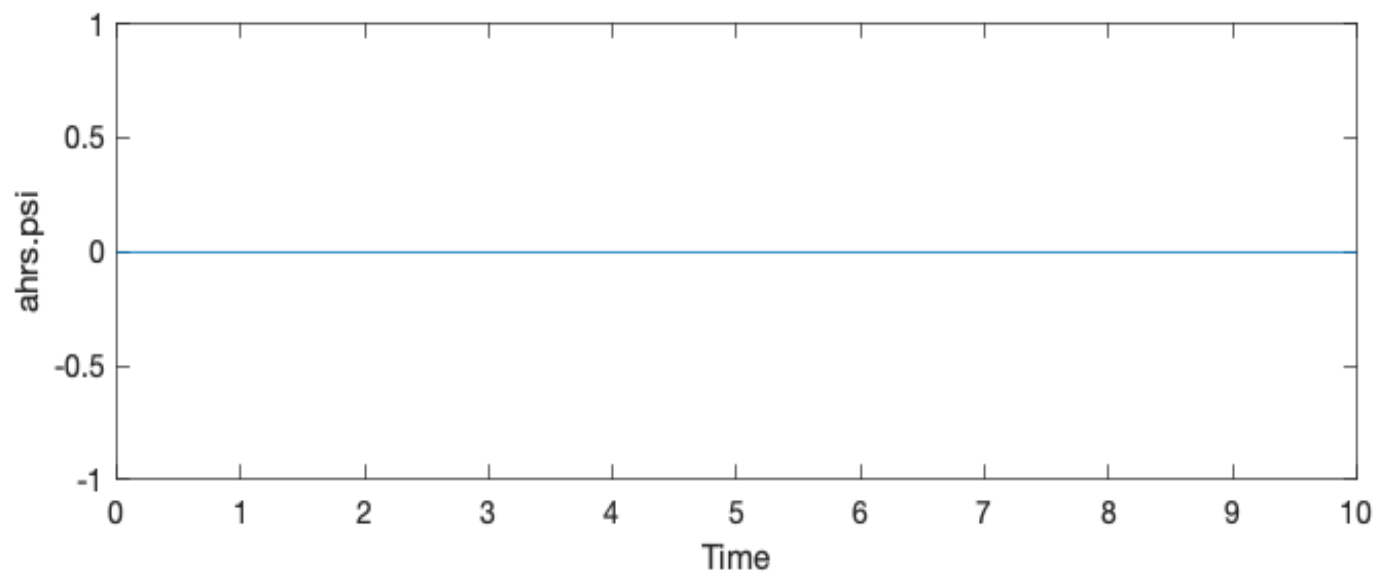
Name	Data Type	Units	Sample Time	Interp	Sync
------	-----------	-------	-------------	--------	------

ahrs.theta	double	deg	0.01	zoh	union
ahrs.phi	double	deg	0.01	zoh	union



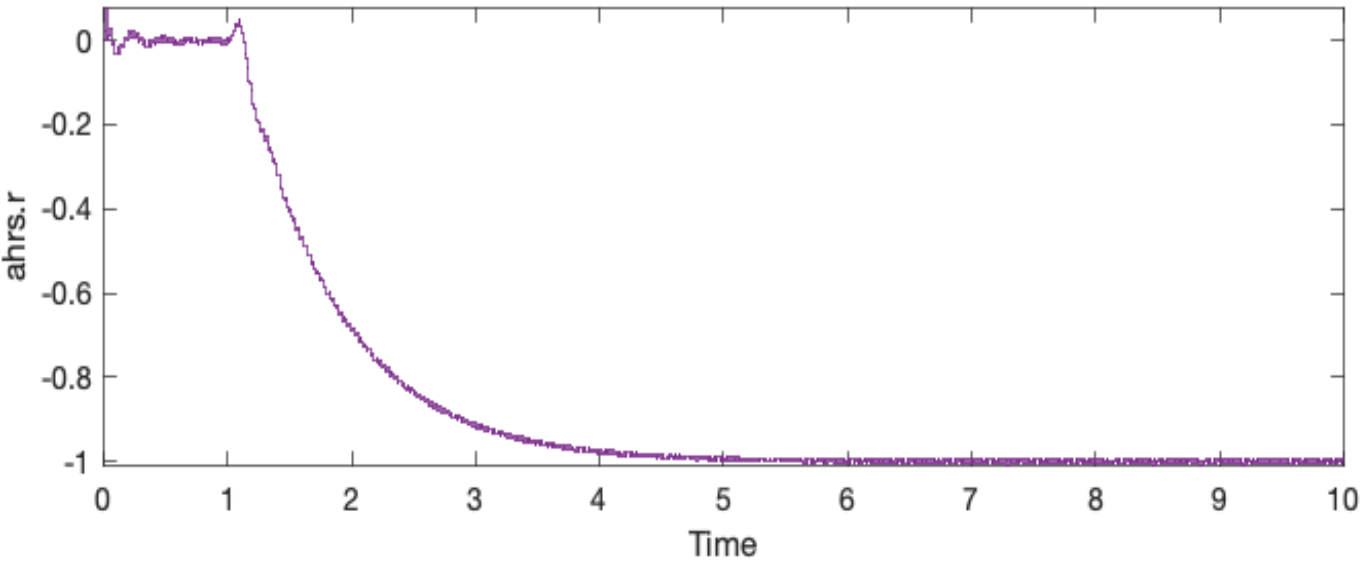
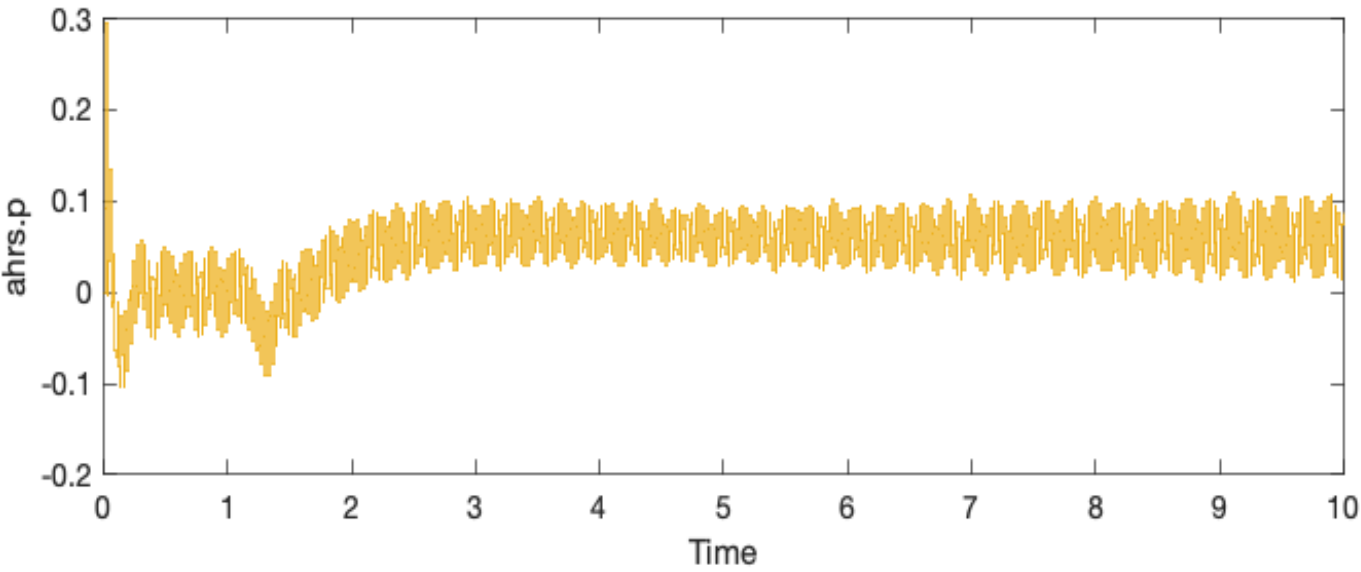
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.psi	double	deg	0.01	zoh	union
ahrs.q	double	deg/sec	0.01	zoh	union



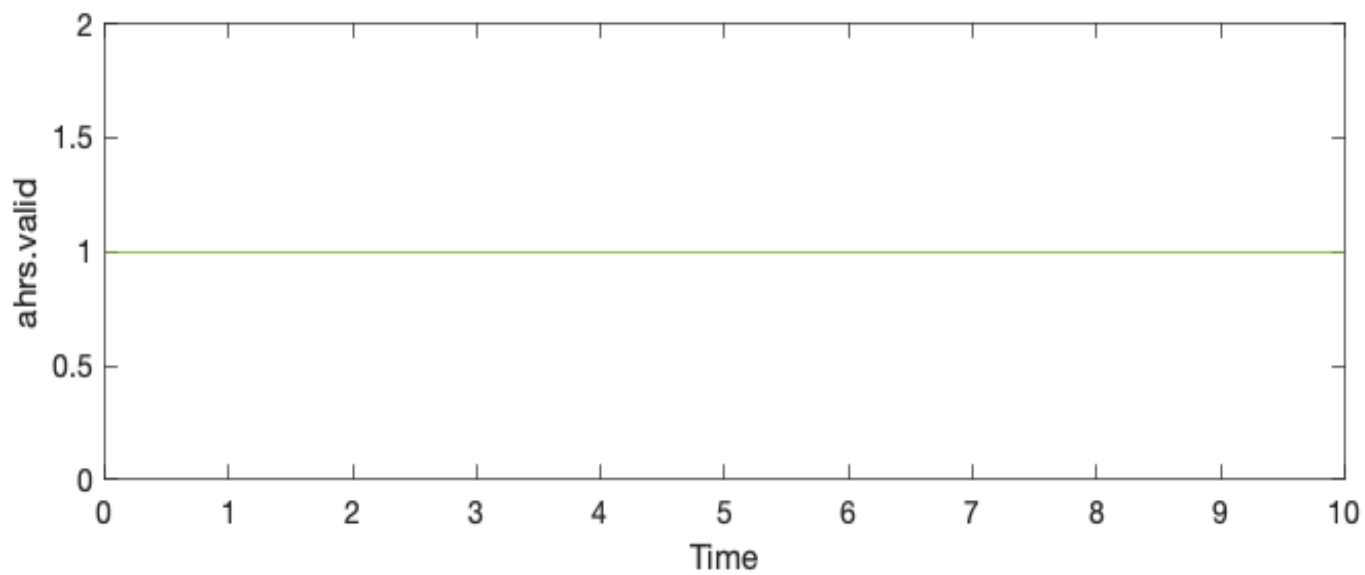
[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.p	double	deg/sec	0.01	zoh	union
ahrs.r	double	deg/sec	0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Name	Data Type	Units	Sample Time	Interp	Sync
ahrs.valid	boolean		0.01	zoh	union



[Back to Report Summary](#)[Back to Signal Summary](#)

Simulation Error:

Input argument #1 is an invalid cvdata object. CVDATA objects become invalid when their associated models are closed or modified

[Back to Report Summary](#)

Custom Criteria Result Information

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

-0.949788312836835

Maximum Value (Inclusive):

-0.6300000000000000

Diagnostic Record:

Outcome:	Passed
Event:	VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:
-1.008096211540845
Minimum Value (Inclusive):
-1.1000000000000000

Diagnostic Record:
Outcome: Passed
Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyGreaterThanOrEqual passed.

Actual Value:
-1.008096211540845
Minimum Value (Inclusive):
-1.0500000000000000

Diagnostic Record:
Outcome: Passed
Event: VerificationPassed

VerificationPassed in custom criteria of sltest.testmanager.TestCase.

Framework Diagnostic:

verifyLessThanOrEqual passed.

Actual Value:

-0.992345449070606

Maximum Value (Inclusive):

-0.9500000000000000
