# **Report Generated by Test Manager**

Title: Branch: 29-testVehicleSIL-optimWIP

**Author:** Previous Commit Hash: f3d9e6e26391d8

add22db338e5232cc2cee41fd0

Date: 18-Oct-2025 17:10:30

# **Test Environment**

Platform: PCWIN64 MATLAB: (R2024a)

# **Summary**

Summar y		Duration		
me Outcome		(Seconds)		
Results: 2025-Oct-18 17:07:54	16 🗸	154.217		
<u> F16</u>	9 🥥	143.858		
□ <u>Vehicle Tests</u>	9 🗸	143.858		
actuators actuators	•	7.134		
I <u>Iteration1</u>	•	7.133		
aero aero	•	2.056		
I <u>Iteration1</u>	•	2.056		
ground contact	•	1.301		
inertial dynamics	•	1.479		
I <u>Iteration1</u>	•	1.479		
vehicle	•	7.996		
I <u>Iteration1</u>	•	7.996		
engine	<b>②</b>	15.753		
addFM	<b>②</b>	0.87		
I <u>Iteration1</u>	•	0.87		
gravity	•	0.805		
<b>FullSIL</b>	•	104.8		
■ <u>sensors</u>	4 🗸	4.692		
Sensor Tests	4 🗸	4.691		
ins ins	•	1.116		
I <u>Iteration1</u>	•	1.115		
adc adc	<b>②</b>	0.969		
I <u>Iteration1</u>	<b>②</b>	0.968		
■ gps	•	0.925		
I <u>Iteration1</u>	<b>②</b>	0.924		

sensors sensors	<b>Ø</b>	1.459
I <u>Iteration1</u>	<b>⊘</b>	1.46
environment	3 🗸	3.819
Environment Tests	3 🗸	3.819
Air	•	0.922
I <u>Iteration1</u>	•	0.922
Earth	•	2.069
I <u>Iteration1</u>	•	2.068
LocalTerrain	•	0.682
I <u>Iteration1</u>	•	0.682

# Results: 2025-Oct-18 17:07:54

Result Type: Result Set Parent: None

Start Time: 18-Oct-2025 17:07:55 End Time: 18-Oct-2025 17:10:29 Outcome: Total: 16, Passed: 16

**Back to Report Summary** 

#### F16

#### **Test Result Information**

Result Type: Test File Result

Parent: <u>Results: 2025-Oct-18 17:07:54</u>

Start Time: 18-Oct-2025 17:07:55 End Time: 18-Oct-2025 17:10:19 Outcome: Total: 9, Passed: 9

#### **Test Suite Information**

Name: F16

**Back to Report Summary** 

### **Vehicle Tests**

#### **Test Result Information**

Result Type: Test Suite Result

Parent: <u>F16</u>

Start Time: 18-Oct-2025 17:07:55 End Time: 18-Oct-2025 17:10:19 Outcome: Total: 9, Passed: 9

#### **Test Suite Information**

Name: Vehicle Tests

**Back to Report Summary** 

#### actuators

#### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:07:55 End Time: 18-Oct-2025 17:08:02

Outcome: Passed

#### **Test Case Information**

Name: actuators Type: Baseline Test

# Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>actuators</u>

Start Time: 18-Oct-2025 17:07:55 End Time: 18-Oct-2025 17:08:02

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.angVel_radps, 0))	
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(1), 0)	)
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(2), 0)	)
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(3), 0)	)
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.momentsInBody_Nm(	(1),
0))	
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.momentsInBody_Nm(	(2),
0))	
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.momentsInBody_Nm(	(3),
0))	
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad,0))	
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad,0))	
Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad,0))	
Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.EngineBus.angVel_radps, 0))	
Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(1), 0))	
Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(2), 0))	
Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(3), 0))	
$ \begin{tabular}{ll} \hline & \textbf{VerifyControllerArmed:} verify (is Close (actuator Bus. Engine Bus. engine Forces Moments. moments In Body\_Nm (1), and the control of the cont$	0))
$ \hline \textbf{\textit{VerifyControllerArmed:}} Verify (is Close (actuator Bus. Engine Bus. engine Forces Moments. moments In Body\_Nm (2), and the sum of the property of th$	0))
$ \hline \textbf{\textit{VerifyControllerArmed:}} \textbf{\textit{Verify(isClose(actuatorBus.EngineBus.engineForcesMoments.momentsInBody\_Nm(3),}} \\ \textbf{\textit{Nm(3),}} $	0))
Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad,0))	
Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad,0))	
Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad,0))	
Test Sequence//verifyAileronRate:verify(aileronCmdRate <= aileronDeflRateLimit_degps)	
Test Sequence//verifyAileronLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad, deg2rad(maxAilDefl_	deg
)))	
Test Sequence//verifyNegAileronRate:verify(abs(aileronCmdRate) <= aileronDeflRateLimit_degps)	
Test Sequence//verifyNegAileronLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad, -deg2rad(maxAilI	)efl
_deg)))	
Test Sequence//verifyElevatorRate:verify(elevatorCmdRate <= elevatorDeflRateLimit_degps)	
Test Sequence//verifyElevatorLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.ServosBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.Servos	or
Defl_deg)))	
Test Sequence//verifyNegElevatorRate:verify(abs(elevatorCmdRate ) <= elevatorDeflRateLimit_degps)	
Test Sequence//verifyNegElevatorLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad, -deg2rad(maxElevator_rad, -deg2rad)	iev
atorDefl_deg)))	
Test Sequence//verifyRudderRate:verify(rudderCmdRate <= rudderDeflRateLimit_degps)	

Test Sequence//verifyRudderMax:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad, deg2rad(maxRudderDefl_
deg)))
Test Sequence//verifyNegRudderRate:verify(abs(rudderCmdRate) <= rudderDeflRateLimit_degps)
Test Sequence//verifyNegRudderMax:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad, -deg2rad(maxRudder
Defl deg)))

# **System Under Test Information**

Model: actuators

Harness: actuatorsTestHarness

Harness Owner: actuators
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: actuatorsTestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time:

Stop Time: 19.02400000000001

Checksum: 1217362366 3671309518 923207239 1239864682

#### Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

#### aero

### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:02 End Time: 18-Oct-2025 17:08:04

Outcome: Passed

#### **Test Case Information**

Name: aero

Type: Baseline Test

# Iteration1

### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>aero</u>

Start Time: 18-Oct-2025 17:08:02 End Time: 18-Oct-2025 17:08:04

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### Test Overrides

lest Overrues		
Parameter Name	Value	
TestSequenceScena	Scenario_1	
rio		

Name
✓ Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(1),0))
☑ Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(2),0))
☑ Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(3),0))
Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(1),0))
▼ Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody Nm(2),0))

Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(3),0))	
Test Sequence1//verifyZeroOutputs:verify(isClose(airDataBus.airspeedInBody_mps(1),0))	
Test Sequence1//verifyZeroOutputs:verify(isClose(airDataBus.airspeedInBody_mps(2),0))	
Test Sequence1//verifyZeroOutputs:verify(isClose(airDataBus.airspeedInBody_mps(3),0))	
Test Sequence1//verifyZeroOutputs:verify(isClose(airDataBus.alpha_rad,0))	
Test Sequence1//verifyZeroOutputs:verify(isClose(airDataBus.beta_rad,0))	
Test Sequence1//verifyAirspeed:verify(aeroForcesMomentsBus.forcesInBody_N(1) < 0)	
Test Sequence1//verifyAirspeed:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(2),0))	
Test Sequence1//verifyAirspeed:verify(aeroForcesMomentsBus.forcesInBody_N(3) < -20500 * lbf2N)	
Test Sequence1//verifyAirspeed:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(1),0))	
Test Sequence1//verifyAirspeed:verify(aeroForcesMomentsBus.momentsInBody_Nm(2) < 0)	
Test Sequence1//verifyAirspeed:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(3),0))	
Test Sequence1//verifyAirspeed:verify(isClose(airDataBus.airspeedInBody_mps(2),0))	
Test Sequence1//verifyAirspeed:verify(isClose(airDataBus.airspeedInBody_mps(3),0))	
Test Sequence1//verifyAirspeed:verify(isClose(airDataBus.alpha_rad,0))	
Test Sequence1//verifyAirspeed:verify(isClose(airDataBus.beta_rad,0))	
Test Sequence1//verifyElevatorDeflection:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(2),0))	
Test Sequence1//verifyElevatorDeflection:verify(aeroForcesMomentsBus.forcesInBody_N(3) > cruiseZForce)	
Test Sequence1//verifyElevatorDeflection:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(1),0))	
Test Sequence1//verifyElevatorDeflection:verify(aeroForcesMomentsBus.momentsInBody_Nm(2) > cruiseYMo	ment)
Test Sequence1//verifyElevatorDeflection:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(3),0))	
Test Sequence1//verifyElevatorDeflection:verify(isClose(airDataBus.airspeedInBody_mps(2),0))	
Test Sequence1//verifyElevatorDeflection:verify(isClose(airDataBus.airspeedInBody_mps(3),0))	
Test Sequence1//verifyElevatorDeflection:verify(isClose(airDataBus.alpha_rad,0))	
Test Sequence1//verifyElevatorDeflection:verify(isClose(airDataBus.beta_rad,0))	
Test Sequence1//verifyRudder:verify(aeroForcesMomentsBus.forcesInBody_N(2) > 0)	
Test Sequence1//verifyRudder:verify(aeroForcesMomentsBus.forcesInBody_N(3) < 0)	
Test Sequence1//verifyRudder:verify(aeroForcesMomentsBus.momentsInBody_Nm(1) > 0)	
Test Sequence1//verifyRudder:verify(aeroForcesMomentsBus.momentsInBody_Nm(2) < 0)	
Test Sequence1//verifyRudder:verify(aeroForcesMomentsBus.momentsInBody_Nm(3) < 0)	
Test Sequence1//verifyRudder:verify(isClose(airDataBus.airspeedInBody_mps(2),0))	
Test Sequence1//verifyRudder:verify(isClose(airDataBus.airspeedInBody_mps(3),0))	
Test Sequence1//verifyRudder:verify(isClose(airDataBus.alpha_rad,0))	
Test Sequence1//verifyRudder:verify(isClose(airDataBus.beta_rad,0))	
Test Sequence1//verifyAileron:verify(aeroForcesMomentsBus.momentsInBody_Nm(1) < 0)	
Test Sequence1//verifyAileron:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(2),cruiseYMoment	,, 

# **System Under Test Information**

Model: aero

Harness: aeroTestHarness

Harness Owner: aero
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: aeroTestHarness/Test Sequence1

Test Sequence Scenario: Scenario\_1

Start Time: 0 Stop Time: 22

Checksum: 2854743191 1458617529 2284628752 3323507110

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

# ground contact

# **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:05 End Time: 18-Oct-2025 17:08:06

Outcome: Passed

# **Test Case Information**

Name: ground contact Type: Baseline Test

Name
Test Sequence1//verifyInitialization:verify(isVehicleAirborne == 0)
Test Sequence1//verifyInitialization:verify(groundCollision == 0)
Test Sequence1//verifyInitialization:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1),0))
Test Sequence1//verifyInitialization:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2),0))
Test Sequence1//verifyInitialization:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3),0))
Test Sequence1//verifyInitialization:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1), 0))
Test Sequence1//verifyInitialization:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2), 0))
Test Sequence1//verifyInitialization:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3), 0))
Test Sequence1//verifyStationary:verify(isVehicleAirborne == 0)
Test Sequence1//verifyStationary:verify(groundCollision == 0)
Test Sequence1//verifyStationary:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0))
Test Sequence1//verifyStationary:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0))
Test Sequence1//verifyStationary:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), -9298.6 * 9.81 ))
Test Sequence1//verifyStationary:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0))
Test Sequence1//verifyStationary:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0))
Test Sequence1//verifyStationary:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0))
Test Sequence1//verifyFastTaxi:verify(isVehicleAirborne == 0)
Test Sequence1//verifyFastTaxi:verify(groundCollision == 0)
Test Sequence1//verifyFastTaxi:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0))
Test Sequence1//verifyFastTaxi:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0))
Test Sequence1//verifyFastTaxi:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), -9298.6 * 9.81 + 20000 ))
Test Sequence1//verifyFastTaxi:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1),0))
Test Sequence1//verifyFastTaxi:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2),0))
Test Sequence1//verifyFastTaxi:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3),0))
Test Sequence1//verifyFastTaxi:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0))
Test Sequence1//verifyFastTaxi:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0))
Test Sequence1//verifyFastTaxi:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0))
Test Sequence1//verifyRotate:verify(isVehicleAirborne == 0)
Test Sequence1//verifyRotate:verify(groundCollision == 0)
Test Sequence1//verifyRotate:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0))

Test Sequence1//verifyRotate:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0))
Test Sequence1//verifyRotate:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), -9298.6 * 9.81 + 20000 ))
Test Sequence1//verifyRotate:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1),0))
Test Sequence1//verifyRotate:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2),0))
Test Sequence1//verifyRotate:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3),0))
Test Sequence1//verifyRotate:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0))
Test Sequence1//verifyRotate:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0))
Test Sequence1//verifyRotate:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0))
Test Sequence1//verifyTakeoff:verify(isVehicleAirborne == 1)
Test Sequence1//verifyTakeoff:verify(groundCollision == 0)
Test Sequence1//verifyTakeoff:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0))
Test Sequence1//verifyTakeoff:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0))
Test Sequence1//verifyTakeoff:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), 0))
Test Sequence1//verifyTakeoff:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1),0))
Test Sequence1//verifyTakeoff:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2),0))
Test Sequence1//verifyTakeoff:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3),0))
Test Sequence1//verifyTakeoff:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0))
Test Sequence1//verifyTakeoff:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0))
Test Sequence1//verifyTakeoff:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0))

# **System Under Test Information**

Model: groundContact

Harness: groundContactTestHarness

Harness Owner: groundContact

Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: groundContactTestHarness/Test Sequence1

Test Sequence Scenario: Scenario\_2

Start Time: 0
Stop Time: 2.028

Checksum: 1244405978 4079976263 897553408 2782662889

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

# inertial dynamics

# **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:06 End Time: 18-Oct-2025 17:08:08

Outcome: Passed

#### **Test Case Information**

Name: inertial dynamics Type: Baseline Test

### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result
Parent: <u>inertial dynamics</u>
Start Time: 18-Oct-2025 17:08:06
End Time: 18-Oct-2025 17:08:08

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

# **Verify Result**

Name
Test Sequence1//Test1:verify(isClose(bodyStatesBus.aircraftPosInNED_m(1), 0.5*interval_time^2*aircraftForcesInNED_N(1)/aircr
aftMass + aircraftInitialPosInNED_m(1)))
Test Sequence1//Test1:verify(isClose(bodyStatesBus.aircraftVelInBody_mps(1), interval_time*aircraftForcesMomentsBus_forcesI
nBody_N(1)/aircraftMass + aircraftInitialVelInBody_mps(1)))
Test Sequence1//Test1:verify(isClose(bodyStatesBus.aircraftAccelInBody_mps2(1),aircraftForcesMomentsBus_forcesInBody_N(1)
/aircraftMass))

#### **Simulation**

# **System Under Test Information**

Model: inertialDynamics

Harness: inertialDynamicsTestHarness

Harness Owner: inertialDynamics

Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: inertialDynamicsTestHarness/Test Sequence1

Test Sequence Scenario: Scenario\_1

Start Time: 0
Stop Time: 1.008

Checksum: 2740628208 4264647383 940722363 2610557463

Simulation Logs:

<u>'aircraftInitialEuler\_rad'</u> is defined, but is never used in the Test Sequence block. <u>Delete this object.</u>

# **Back to Report Summary**

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

**Back to Report Summary** 

#### vehicle

#### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:08 End Time: 18-Oct-2025 17:08:16

Outcome: Passed

### **Test Case Information**

Name: vehicle

Type: Baseline Test

#### Iteration1

### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>vehicle</u>

Start Time: 18-Oct-2025 17:08:08 End Time: 18-Oct-2025 17:08:16

Outcome: Passed

# **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

# **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

Name
Test Sequence//verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(1), 0 ))
Test Sequence//verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))
Test Sequence//verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0 ))
Test Sequence//verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(1),0))
Test Sequence//verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2),0))
Test Sequence//verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(3),0))
Test Sequence//verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(1), 0 ))
Test Sequence//verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))
Test Sequence//verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0 ))
Test Sequence//verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(1),0))
Test Sequence//verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2),0))
Test Sequence//verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(3),0))
✓ Test Sequence//verifyThrottle:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)
Test Sequence//verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))
Test Sequence//verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0 ))
Test Sequence//verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(1),0))
Test Sequence//verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2),0))
Test Sequence//verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(3),0))
Test Sequence//verifyPitchIntoGround:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2), 0))

	Test Sequence//verifyPitchIntoGround:verify(isClose(vehicleBus.BodyStates.aircraftEulerAngles_rad(2) , 0))
	Test Sequence//verifyPitchIntoGround:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0))
	Test Sequence//verifyPitchIntoGround:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)
	Test Sequence//verifyPitchIntoGround:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))
	Zest Sequence//verifydeflectElevator:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2), 0, 'absTol', 0.01))
(	Test Sequence//verifydeflectElevator:verify(isClose(vehicleBus.BodyStates.aircraftEulerAngles_rad(2), 0, 'absTol', 0.01 ))
(	Test Sequence//verifydeflectElevator:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0, 'absTol', 0.01))
(	Test Sequence//verifydeflectElevator:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)
(	☑ Test Sequence//verifydeflectElevator:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))
(	Test Sequence//verifyRotate:verify(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2) > 0)
(	Test Sequence//verifyRotate:verify(vehicleBus.BodyStates.aircraftEulerAngles_rad(2) > 0)
(	☑ Test Sequence//verifyRotate:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(3) < 0)
(	Test Sequence//verifyRotate:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)
(	Test Sequence//verifyRotate:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))
(	☑ Test Sequence//verifyFlying:verify(vehicleBus.BodyStates.aircraftPosInNED_m(3) < 0)
	Test Sequence//verifyFlying:verify(vehicleBus.BodyStates.aircraftEulerAngles_rad(2) > 0)
(	Test Sequence//verifyFlying:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)
(	Test Sequence//verifyFlying:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0))

# **System Under Test Information**

Model: F16

Harness: F16TestHarness

Harness Owner: F16
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration
Test Sequence Block: F16TestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0

Stop Time: 86.0199999999999

Checksum: 2184461690 750684721 2704972700 135817865

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

# engine

# **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:16 End Time: 18-Oct-2025 17:08:32

Outcome: Passed

#### **Test Case Information**

Name: engine

Type: Baseline Test

# **Verify Result**

Name
Test Sequence//verifyControllerDisarm:verify(isClose(engineBus.engineForcesMoments.forcesInBody_N(1),0))
Test Sequence//verifyThorttle:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))
☑ Test Sequence//verifyMaxThrust:verify(engineBus.engineForcesMoments.forcesInBody_N(1) < 130000)
Test Sequence//verifyMaxThrust:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))
Test Sequence//verifyWithAirspeed:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))
Test Sequence//verifyIncreaseAirspeed:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))
Test Sequence//verifyIncreaseAltitude:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))

#### **Simulation**

# **System Under Test Information**

Model: engineModelF16

Harness: engineModelF16TestHarness

Harness Owner: engineModelF16

Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: engineModelF16TestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0

Stop Time: 38.00399999999998

Checksum: 3632656878 226596412 27427538 2773569956

### Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

### **Back to Report Summary**

### addFM

#### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:32 End Time: 18-Oct-2025 17:08:33

Outcome: Passed

#### **Test Case Information**

Name: addFM

Type: Baseline Test

#### Iteration1

# **Test Result Information**

Result Type: Test Iteration Result

Parent: addFM

Start Time: 18-Oct-2025 17:08:32 End Time: 18-Oct-2025 17:08:33

Outcome: Passed

# **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

# **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

Name
Test Sequence1//Test1:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.forcesInBody_N + e
$ngine Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces Bus. forc$
))
Test Sequence1//Test1:verify(all(isClose(aircraftForcesMomentsBus.momentsInBody_Nm, engineForcesMomentsBus.momentsIn
Body_Nm + aeroForcesMomentsBus.momentsInBody_Nm + weightForcesMomentsBus.momentsInBody_Nm)))
Test Sequence1//Test2:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.forcesInBody_N + e
$ngine Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces Bus. forces$
))
Test Sequence1//Test2:verify(all(isClose(aircraftForcesMomentsBus.momentsInBody_Nm, aeroForcesMomentsBus.momentsInB
ody_Nm + engineForcesMomentsBus.momentsInBody_Nm + weightForcesMomentsBus.momentsInBody_Nm)))
Test Sequence1//verifyPitchIntoGround:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.f
$orces In Body\_N + engine Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces Bus. f$
s.forcesInBody_N)))
Test Sequence1//verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody_Nm(1), 0))
Test Sequence1//verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody_Nm(2), engineForcesMomen
$ts Bus. moments In Body\_Nm(2) + aero Forces Moments Bus. moments In Body\_Nm(2) + weight Forces Moments Bus. moments Bu$
))

Test Sequence1/.../verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody\_Nm(3), engineForcesMomentsBus.momentsInBody\_Nm(3) + aeroForcesMomentsBus.momentsInBody\_Nm(3) + weightForcesMomentsBus.momentsInBody\_Nm(3))

#### **Simulation**

### **System Under Test Information**

Model: addFM

Harness: addFMTestHarness

Harness Owner: addFM
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: addFMTestHarness/Test Sequence1

Test Sequence Scenario: Scenario\_1

Start Time: 0 Stop Time: 3.016

Checksum: 2405791290 3021241631 2400769033 306058281

#### Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

### **Back to Report Summary**

# gravity

#### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:33 End Time: 18-Oct-2025 17:08:34 Outcome: Passed

# **Test Case Information**

Name: gravity

Type: Baseline Test

# **Verify Result**

Name
Test Sequence1//Test1:verify(isClose(weightForcesMoments.forcesInBody_N(1), 0))
Test Sequence1//Test1:verify(isClose(weightForcesMoments.forcesInBody_N(2), 0))
Test Sequence1//Test1:verify(isClose(weightForcesMoments.forcesInBody_N(3), weight_N))
Test Sequence1//Test1:verify(isClose(sum(weightForcesMoments.momentsInBody_Nm(1:3)), 0))
Test Sequence1//Test2:verify(isClose(weightForcesMoments.forcesInBody_N(1), -weight_N * sin(pitch_rad)))
Test Sequence1//Test2:verify(isClose(weightForcesMoments.forcesInBody_N(2), 0))
Test Sequence1//Test2:verify(isClose(weightForcesMoments.forcesInBody_N(3), weight_N * cos(pitch_rad)))
Test Sequence1//Test2:verify(isClose(sum(weightForcesMoments.momentsInBody_Nm(1:3)), 0))
Test Sequence1//Test3:verify(isClose(weightForcesMoments.forcesInBody_N(1), -weight_N * sin(pitch_rad)))
☑ Test Sequence1//Test3:verify(isClose(weightForcesMoments.forcesInBody_N(2), weight_N * sin(roll_rad) * cos(pitch_rad)))
Test Sequence1//Test3:verify(isClose(weightForcesMoments.forcesInBody_N(3), weight_N * cos(roll_rad) * cos(pitch_rad)))
Test Sequence1//Test3:verify(isClose(sum(weightForcesMoments.momentsInBody_Nm(1:3)), 0))

#### **Simulation**

# **System Under Test Information**

Model: gravity

Harness: gravityTestHarness

Harness Owner: gravity
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: gravityTestHarness/Test Sequence1

Test Sequence Scenario: Scenario\_1

Start Time: 0

Stop Time: 0.02800000000000001

Checksum: 371801570 4075467097 1945074898 1201465379

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

#### **FullSIL**

#### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 18-Oct-2025 17:08:34 End Time: 18-Oct-2025 17:10:19

Outcome: Passed

#### **Test Case Information**

Name: FullSIL

Type: Baseline Test

#### **Simulation**

# **System Under Test Information**

Model: VehiclePlant

Harness: VehiclePlantTestHarness

Harness Owner: VehiclePlant Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Start Time: 0

Stop Time: 280.0040000000002

Checksum: 1417193510 12782118 1430295359 339169230

# Simulation Logs:

<u>'SensorsBus'</u> is defined, but is never used in the Test Sequence block. <u>Delete this object.</u>

<u>'VehicleBus'</u> is defined, but is never used in the Test Sequence block. <u>Delete this object.</u>

Warning issued while simulating Model block '<u>VehiclePlantTestHarness/</u> VehiclePlant'.

### **Back to Report Summary**

### Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

**Back to Report Summary** 

#### sensors

#### **Test Result Information**

Result Type: Test File Result

Parent: Results: 2025-Oct-18 17:07:54

Start Time: 18-Oct-2025 17:10:19 End Time: 18-Oct-2025 17:10:24 Outcome: Total: 4, Passed: 4

#### **Test Suite Information**

Name: sensors

<u>Back to Report Summary</u>

#### **Sensor Tests**

#### **Test Result Information**

Result Type: Test Suite Result

Parent: <u>sensors</u>

Start Time: 18-Oct-2025 17:10:19 End Time: 18-Oct-2025 17:10:24 Outcome: Total: 4, Passed: 4

#### **Test Suite Information**

Name: Sensor Tests

**Back to Report Summary** 

### ins

#### **Test Result Information**

Result Type: Test Case Result Parent: Sensor Tests

Start Time: 18-Oct-2025 17:10:19 End Time: 18-Oct-2025 17:10:20

Outcome: Passed

#### **Test Case Information**

Name: ins

Type: Baseline Test

### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>ins</u>

Start Time: 18-Oct-2025 17:10:19 End Time: 18-Oct-2025 17:10:20

Outcome: Passed

# **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

# **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

Name
Test Sequence//checkInsStatic:verify(isClose(INSSensorBus.GyroSensorBus.x_radps, 0, 'atol', 0.01))
Test Sequence//checkInsStatic:verify(isClose(INSSensorBus.GyroSensorBus.y_radps, 0, 'atol', 0.01))
Test Sequence//checkInsStatic:verify(isClose(INSSensorBus.GyroSensorBus.z_radps, 0, 'atol', 0.01))
Test Sequence//checkInsStatic:verify(isClose(INSSensorBus.AccelSensorBus.x_mps2, 0, 'atol', 0.01))
Test Sequence//checkInsStatic:verify(isClose(INSSensorBus.AccelSensorBus.y_mps2, 0, 'atol', 0.01))
Test Sequence//checkInsStatic:verify(isClose(INSSensorBus.AccelSensorBus.z_mps2, 0, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.GyroSensorBus.x_radps, 0.1, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.GyroSensorBus.y_radps, 0.2, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.GyroSensorBus.z_radps, 0.3, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.MagSensorBus.x_Gauss, 0, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.MagSensorBus.y_Gauss, 0, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.MagSensorBus.z_Gauss, 0, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.AccelSensorBus.x_mps2, 1, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.AccelSensorBus.y_mps2, 2, 'atol', 0.01))
Test Sequence//checkInsDynamic:verify(isClose(INSSensorBus.AccelSensorBus.z_mps2, 3, 'atol', 0.01))

### **System Under Test Information**

Model: ins

Harness: insTestHarness

Harness Owner: ins
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration
Test Sequence Block: insTestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0

Stop Time: 10.00800000000001

Checksum: 677169283 1337975363 3752592478 3123190075

### Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

### adc

#### **Test Result Information**

Result Type: Test Case Result Parent: Sensor Tests

Start Time: 18-Oct-2025 17:10:20 End Time: 18-Oct-2025 17:10:21

Outcome: Passed

#### **Test Case Information**

Name: adc

Type: Baseline Test

# Iteration1

# **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>adc</u>

Start Time: 18-Oct-2025 17:10:20 End Time: 18-Oct-2025 17:10:21

Outcome: Passed

# **Test Case Information**

Name: Iteration1 Type: Baseline Test

# **Iteration Settings**

### **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

Name
Test Sequence//checkSensors:verify(isClose(ADCSensorBus.BaroSensorBus.altitude_m, 0, 'atol', 20))
Test Sequence//checkSensors:verify(isClose(ADCSensorBus.BaroSensorBus.pressure_pa, 101325, 'atol', 100))
Test Sequence//checkSensors:verify(isClose(ADCSensorBus.BaroSensorBus.temperature_degC, 15, 'atol', 2))
Test Sequence//checkSensors:verify(isClose(ADCSensorBus.DiffPressureSensorBus.differential_pressure_pa, 0, 'atol', 100))
Test Sequence//checkSensors:verify(isClose(ADCSensorBus.DiffPressureSensorBus.temperature_degC, 15, 'atol', 2))
Test Sequence//checkSensors10kft:verify(isClose(ADCSensorBus.BaroSensorBus.altitude_m, 3048, 'atol', 20))
Test Sequence//checkSensors10kft:verify(isClose(ADCSensorBus.BaroSensorBus.pressure_pa, 69681.66, 'atol', 100))
Test Sequence//checkSensors10kft:verify(isClose(ADCSensorBus.BaroSensorBus.temperature_degC, -4.8, 'atol', 2))
Test Sequence//checkSensors10kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.differential_pressure_pa, 0, 'atol', 100))
Test Sequence//checkSensors10kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.temperature_degC, -4.8, 'atol', 2))
Test Sequence//checkSensors20kft:verify(isClose(ADCSensorBus.BaroSensorBus.altitude_m, 6096, 'atol', 20))
Test Sequence//checkSensors20kft:verify(isClose(ADCSensorBus.BaroSensorBus.pressure_pa, 46563.26, 'atol', 100))

- Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.BaroSensorBus.temperature\_degC, -24.624, 'atol', 2))
- Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.differential\_pressure\_pa, 0, 'atol', 100))
- Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.temperature\_degC, -24.624, 'atol', 2))
- Test Sequence/.../checkDiffPress:verify(ADCSensorBus.DiffPressureSensorBus.differential\_pressure\_pa > 0)

### **System Under Test Information**

Model: adc

Harness: adcTestHarness

Harness Owner: adc
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration
Test Sequence Block: adcTestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0

Stop Time: 0.03200000000000001

Checksum: 1104384803 2190219993 1982550312 115166805

### Simulation Logs:

Warning issued while simulating Model block 'adcTestHarness/adc'.

# **Back to Report Summary**

# Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

**Back to Report Summary** 

# gps

#### **Test Result Information**

Result Type: Test Case Result Parent: Sensor Tests

Start Time: 18-Oct-2025 17:10:21 End Time: 18-Oct-2025 17:10:22

Outcome: Passed

# **Test Case Information**

Name: gps

Type: Baseline Test

# Iteration1

# **Test Result Information**

Result Type: Test Iteration Result

Parent: gps

Start Time: 18-Oct-2025 17:10:21 End Time: 18-Oct-2025 17:10:22

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

### **Iteration Settings**

#### **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

# **Verify Result**

Name	
Test Sequence//checkGpsStatic:verify(isClose(GPSSensorBus.lat_deg, referenceLatitude_deg))	
Test Sequence//checkGpsStatic:verify(isClose(GPSSensorBus.lon_deg, referenceLongitude_deg))	
Test Sequence//checkGpsStatic:verify(isClose(GPSSensorBus.alt_m, terrainHeightNED_m, 'atol', 0.5))	
Test Sequence//checkGpsStatic:verify(isClose(GPSSensorBus.vel_mps, 0, 'atol', 0.5))	
Test Sequence//checkGpsStatic:verify(isClose(GPSSensorBus.vel_n_mps, 0, 'atol', 0.5))	
Test Sequence//checkGpsStatic:verify(isClose(GPSSensorBus.vel_e_mps, 0, 'atol', 0.5))	
Test Sequence//checkGpsStatic:verify(isClose(GPSSensorBus.vel_d_mps, 0, 'atol', 0.5))	
Test Sequence//checkHighDynamic:verify(isClose(GPSSensorBus.lat_deg, referenceLatitude_deg))	
Test Sequence//checkHighDynamic:verify(isClose(GPSSensorBus.lon_deg, referenceLongitude_deg))	
Test Sequence//checkHighDynamic:verify(isClose(GPSSensorBus.alt_m, 3048 + terrainHeightNED_m))	
Test Sequence//checkHighDynamic:verify(isClose(GPSSensorBus.vel_mps, norm([10 20 30]), 'rtol', 0.8))	
Test Sequence//checkHighDynamic:verify(isClose(GPSSensorBus.vel_n_mps, 10, 'rtol', 0.1))	
Test Sequence//checkHighDynamic:verify(isClose(GPSSensorBus.vel_e_mps, 20, 'rtol', 0.1))	
Test Sequence//checkHighDynamic:verify(isClose(GPSSensorBus.vel_d_mps, 30, 'rtol', 0.1))	

# **Simulation**

# System Under Test Information

Model: gps

Harness: gpsTestHarness

Harness Owner: gps
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration
Test Sequence Block: gpsTestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0
Stop Time: 0.016

Checksum: 1297848071 2767701485 3129243928 1222317831

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

#### sensors

#### **Test Result Information**

Result Type: Test Case Result Parent: Sensor Tests

Start Time: 18-Oct-2025 17:10:22 End Time: 18-Oct-2025 17:10:24

Outcome: Passed

#### **Test Case Information**

Name: sensors

Type: Baseline Test

# Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: sensors

Start Time: 18-Oct-2025 17:10:22 End Time: 18-Oct-2025 17:10:24

Outcome: Passed

#### **Test Case Information**

Name: Iteration1 Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

#### **Simulation**

# System Under Test Information

Model: sensors

Harness: sensorsTestHarness

Harness Owner: sensors
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: sensorsTestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0

Stop Time: 0.2000000000000001

Checksum: 2546553817 1139126873 1496895507 1797210819

#### Simulation Logs:

No data is logged for the model 'sensorsTestHarness'.

<u>'SensorsBus'</u> is defined, but is never used in the Test Sequence block. <u>Delete this object.</u>

Warning issued while simulating Model block 'sensorsTestHarness/sensors'.

**Back to Report Summary** 

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

# **Back to Report Summary**

#### environment

#### **Test Result Information**

Result Type: Test File Result

Parent: <u>Results: 2025-Oct-18 17:07:54</u>

Start Time: 18-Oct-2025 17:10:24 End Time: 18-Oct-2025 17:10:28 Outcome: Total: 3, Passed: 3

#### **Test Suite Information**

Name: environment

**Back to Report Summary** 

# **Environment Tests**

#### **Test Result Information**

Result Type: Test Suite Result Parent: environment

Start Time: 18-Oct-2025 17:10:24 End Time: 18-Oct-2025 17:10:28 Outcome: Total: 3, Passed: 3

#### **Test Suite Information**

Name: Environment Tests

**Back to Report Summary** 

### Air

#### **Test Result Information**

Result Type: Test Case Result
Parent: Environment Tests
Start Time: 18-Oct-2025 17:10:24
End Time: 18-Oct-2025 17:10:25

Outcome: Passed

#### **Test Case Information**

Name: Air

Type: Baseline Test

# Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>Air</u>

Start Time: 18-Oct-2025 17:10:24 End Time: 18-Oct-2025 17:10:25

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	

Test Sequence//Test1:verify(isClose(AirEnvironmentBus.windSpeedInNED_mps(1), 4))	
Test Sequence//Test1:verify(isClose(AirEnvironmentBus.windSpeedInNED_mps(2), 3))	
Test Sequence//Test1:verify(isClose(AirEnvironmentBus.windSpeedInNED_mps(3), 2))	
Test Sequence//Test1:verify(isClose(AirEnvironmentBus.airTemperature_K, 288.15))	
Test Sequence//Test1:verify(isClose(AirEnvironmentBus.airPressure_Pa, 1.01325e5))	
Test Sequence//Test1:verify(isClose(AirEnvironmentBus.airDensity_kgpm3, 1.225))	
Test Sequence//Test1:verify(isClose(AirEnvironmentBus.speedOfSound_mps, 340.29412435))	

# **System Under Test Information**

Model: Air

Harness: AirTestHarness

Harness Owner: Air
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration
Test Sequence Block: AirTestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0
Stop Time: 3.004

Checksum: 2333579960 118194984 3293710571 2811700376

### Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

**Back to Report Summary** 

### Earth

#### **Test Result Information**

Result Type: Test Case Result
Parent: Environment Tests
Start Time: 18-Oct-2025 17:10:25
End Time: 18-Oct-2025 17:10:27

Outcome: Passed

#### **Test Case Information**

Name: Earth

Type: Baseline Test

### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: Earth

Start Time: 18-Oct-2025 17:10:25 End Time: 18-Oct-2025 17:10:27

Outcome: Passed

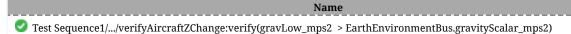
#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

### **Iteration Settings**

#### **Test Overrides**

Parameter Name	Value
TestSequenceScena	Scenario_1
rio	



# **System Under Test Information**

Model: Earth

Harness: EarthTestHarness

Harness Owner: Earth
Release: Current
Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: EarthTestHarness/Test Sequence1

Test Sequence Scenario: Scenario\_1

Start Time: 0 Stop Time: 7

Checksum: 1175429799 1798864983 927034458 1191542450

#### Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

**Back to Report Summary** 

# LocalTerrain

#### **Test Result Information**

Result Type: Test Case Result
Parent: Environment Tests
Start Time: 18-Oct-2025 17:10:27
End Time: 18-Oct-2025 17:10:28

Outcome: Passed

#### **Test Case Information**

Name: LocalTerrain Type: Baseline Test

### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: LocalTerrain

Start Time: 18-Oct-2025 17:10:27 End Time: 18-Oct-2025 17:10:28

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

### **Iteration Settings**

### **Test Overrides**

	Parameter Name	Value	
	TestSequenceScena	Scenario_1	
	rio		

#### **Simulation**

# **System Under Test Information**

Model: LocalTerrain

Harness: LocalTerrainTestHarness

Harness Owner: LocalTerrain Release: Current simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: standardSILConfiguration

Test Sequence Block: LocalTerrainTestHarness/Test Sequence

Test Sequence Scenario: Scenario\_1

Start Time: 0

Stop Time: 0.004000000000000001

Checksum:

1661112760 514905542 80377983 1575265004

Simulation Logs:

No data is logged for the model 'LocalTerrainTestHarness'.

<u>'TerrainEnvironmentBus'</u> is defined, but is never used in the Test Sequence block. <u>Delete this object.</u>

# **Back to Report Summary**

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

**Back to Report Summary**