# MATLAB® Test Report

Timestamp: 16-Mar-2025 16:19:16

Host: fv-az2027-885

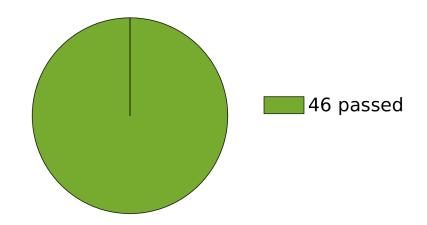
Platform: glnxa64

MATLAB Version: 24.2.0.2863752 (R2024b) Update 5

Number of Tests: 46

Testing Time: 2.9647 seconds

Overall Result: PASSED



### Overview

/home/runner/work/astroDynamics/astroDynamics/classes/src/MassiveBodies/SphericalMass/test/		
	SphericalMassDynamics_test ⊗⊗⊚	1.5334 seconds
	SphericalMassOperatorOverload_test ⊗	0.0252 seconds
	<u>SphericalMass_test</u> <i>0</i>	0.0740 seconds
/home/runner/work/astroDynamics/astroDynamics/classes/src/Universe/test/		
	Universe_test	0.1089 seconds
/home/runner/work/astroDynamics/astroDynamics/classes/src/UniverseSimulation/test/		
	UniverseSimulationIntegration_test ⊚	1.2232 seconds

### **Details**

/home/runner/work/astroDynamics/astroDynamics/classes/src/MassiveBodies/Spherical Mass/test/

#### SphericalMassDynamics\_test

checkCalculateDeltaTselfZeroVelocityTest Tags: MatlabUnitTest

The test passed.

Duration: 1.4839 seconds

(Overview)

checkCalculateDeltaTselfFiniteVelocity

Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0071 seconds

(Overview)

checkDynamicCentralMassAction Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0424 seconds

(Overview)

SphericalMassOperatorOverload\_test

#### 

The test passed.

Duration: 0.0252 seconds

(Overview)

#### SphericalMass\_test

# checkConstructor\_0argsTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0066 seconds

(Overview)

## checkConstructor\_2argsTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0030 seconds

(Overview)

## ⊘ checkConstructor\_4argsTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0028 seconds

(Overview)

## checkConstructor\_6argsTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0013 seconds

(Overview)

#### 

Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0027 seconds

(Overview)

#### $@\ check Force Density X direction Outside Sphere\\$

Test Parameters: deltaPos=-7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0057 seconds

#### ocheckForceDensityXdirectionOutsideSphere

Test Parameters: deltaPos=-5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0044 seconds

(Overview)

#### 

Test Parameters: deltaPos=-3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0068 seconds

(Overview)

#### 

Test Parameters: deltaPos=-1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0031 seconds

(Overview)

#### checkForceDensityXdirectionOutsideSphere

Test Parameters: deltaPos=1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0040 seconds

(Overview)

#### ocheckForceDensityXdirectionOutsideSphere

Test Parameters: deltaPos=3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### checkForceDensityXdirectionOutsideSphere

Test Parameters: deltaPos=5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

#### ocheckForceDensityXdirectionOutsideSphere

Test Parameters: deltaPos=7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### checkForceDensityYDirectionOutsideSphere

Test Parameters: deltaPos=-7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0024 seconds

(Overview)

#### 

Test Parameters: deltaPos=-5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 seconds

(Overview)

#### checkForceDensityYDirectionOutsideSphere

Test Parameters: deltaPos=-3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0013 seconds

(Overview)

#### ocheckForceDensityYDirectionOutsideSphere

Test Parameters: deltaPos=-1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 seconds

(Overview)

#### checkForceDensityYDirectionOutsideSphere

Test Parameters: deltaPos=1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0037 seconds

#### checkForceDensityYDirectionOutsideSphere

Test Parameters: deltaPos=3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### 

Test Parameters: deltaPos=5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### 

Test Parameters: deltaPos=7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### ocheckForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=-7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0031 seconds

(Overview)

#### ocheckForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=-5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0020 seconds

(Overview)

#### ocheckForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=-3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 seconds

#### ocheckForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=-1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 seconds

(Overview)

#### 

Test Parameters: deltaPos=1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0037 seconds

(Overview)

#### 

Test Parameters: deltaPos=3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0006 seconds

(Overview)

#### ocheckForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### ○ checkForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### ocheckForceDensitYdirectionInsideSphere

Test Parameters: deltaPos=-7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0024 seconds

#### ocheckForceDensitYdirectionInsideSphere

Test Parameters: deltaPos=-5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 seconds

(Overview)

#### 

Test Parameters: deltaPos=-3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0013 seconds

(Overview)

#### ocheckForceDensitYdirectionInsideSphere

Test Parameters: deltaPos=-1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 seconds

(Overview)

#### ocheckForceDensitYdirectionInsideSphere

Test Parameters: deltaPos=1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0037 seconds

(Overview)

#### 

Test Parameters: deltaPos=3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### ocheckForceDensitYdirectionInsideSphere

Test Parameters: deltaPos=5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

#### ocheckForceDensitYdirectionInsideSphere

Test Parameters: deltaPos=7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

(Overview)

#### /home/runner/work/astroDynamics/astroDynamics/classes/src/Universe/test/

#### Universe\_test

## checkUniverseConstructorTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0139 seconds

(Overview)

## checkUniverseAddMassiveBodyTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0058 seconds

(Overview)

#### 

Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0352 seconds

(Overview)

#### checkTimePropagateUniverse Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0540 seconds

(Overview)

#### /home/runner/work/astroDynamics/astroDynamics/classes/src/UniverseSimulation/test/

#### UniverseSimulationIntegration\_test

#### 

The test passed.

Duration: 1.2232 seconds