# MATLAB® Test Report

Timestamp: 09-Mar-2025 10:41:11

Host: fv-az1680-744

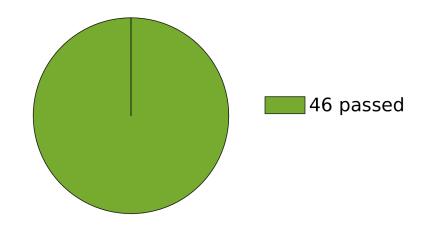
Platform: glnxa64

MATLAB Version: 24.2.0.2863752 (R2024b) Update 5

Number of Tests: 46

Testing Time: 3.3072 seconds

Overall Result: PASSED



### Overview

/home/runner/work/astroDynamics/astroDynamics/classes/src/MassiveBodies/SphericalMass/test/	
SphericalMassDynamics_test ⊗⊗⊗	1.6007 seconds
SphericalMassOperatorOverload test   ⊗	0.0256 seconds
<u>SphericalMass_test</u> @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@	0.0742 seconds
/home/runner/work/astroDynamics/astroDynamics/classes/src/Universe/test/	
Universe test ⊗⊗⊗	0.1090 seconds
/home/runner/work/astroDynamics/astroDynamics/classes/src/UniverseSimulation/	<u>/test/</u>
<u>UniverseSimulationIntegration_test</u> ⊘	1.4977 seconds

### **Details**

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

#### SphericalMassDynamics\_test

checkCalculateDeltaTselfZeroVelocityTest Tags: MatlabUnitTest

The test passed.

Duration: 1.5479 seconds

(Overview)

checkCalculateDeltaTselfFiniteVelocity

Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0074 seconds

(Overview)

checkDynamicCentralMassAction Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0455 seconds

(Overview)

SphericalMassOperatorOverload\_test

#### 

The test passed.

Duration: 0.0256 seconds

(Overview)

#### SphericalMass\_test

# checkConstructor\_0argsTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0067 seconds

(Overview)

## checkConstructor\_2argsTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0029 seconds

(Overview)

#### 

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)

#### ocheckForceDensityXdirectionOutsideSphere

Test Parameters: deltaPos=-7 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0058 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: 0.0067 seconds

(Overview)

#### 

Test Parameters: deltaPos=-1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0031 seconds

(Overview)

#### 

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)

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

Test Parameters: deltaPos=5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0001 seconds

#### checkForceDensityXdirectionOutsideSphere

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)

#### 

Test Parameters: deltaPos=-3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 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

#### ocheckForceDensityYDirectionOutsideSphere

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: 0.0032 seconds

(Overview)

#### ○ checkForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=-5 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0022 seconds

(Overview)

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

Test Parameters: deltaPos=-3 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0015 seconds

#### ocheckForceDensityXdirectionInsideSphere

Test Parameters: deltaPos=-1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0014 seconds

(Overview)

#### ocheckForceDensityXdirectionInsideSphere

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: 0.0005 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: 0.0022 seconds

#### 

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: 0.0014 seconds

(Overview)

#### 

Test Parameters: deltaPos=-1 Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0013 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: 0.0143 seconds

(Overview)

### checkUniverseAddMassiveBodyTest Tags: MatlabUnitTest

The test passed.

Duration: 0.0059 seconds

(Overview)

#### 

Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0350 seconds

(Overview)

#### checkTimePropagateUniverse Test Tags: MatlabUnitTest

The test passed.

Duration: 0.0538 seconds

(Overview)

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

#### UniverseSimulationIntegration\_test

#### 

The test passed.

Duration: 1.4977 seconds