

---

# CelestialConstants

## Table of Contents

Description .....	1
Earth .....	1
Venus .....	1
Mars .....	1
Jupiter .....	1
Celestial units .....	1
Physical constants .....	1

## Description

All sorts of constants for orbital mechanics purposes

```
fcnPrintQueue(mfilename('fullpath')) % Add this code to code app
```

## Earth

```
Earth.mu = 3.986e5; %km3/s2
Earth.R = 6378; %km
Earth.a = 149598023; %km

%%Sun
Sun.mu = 1.32712428e11; %km3/s2
```

## Venus

```
Venus.a = 108208601; %km
```

## Mars

```
Mars.a = 227939186; %km
```

## Jupiter

```
Jupiter.a = 778298361; %km
```

## Celestial units

```
au2km = 149597870.7;
```

## Physical constants

```
day2sec = 86400; % sec/day
```

*Published with MATLAB® R2013b*