
CelestialConstants

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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
Earth.spin_rate = 7.2921158553e-05; %rad/s
Earth.flattening = 1/298.25722; %WGS-84

%%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