Masses and references:

M\_Sun = 1.988544E30;

M\_Mercury = 3.302E23;

M\_Venus = 4.8685E24;

M\_Earth = 5.97219E24;

M\_Mars = 6.4185E23;

M\_Jupiter = 1.89813E27;

M\_Saturn = 5.68319E26;

M\_Uranus = 8.68103E25;

M\_Neptune = 1.0241E26;

M\_Ceres = 9.39300E20;

M\_Pluto = 1.307E22;

M\_Haumea = 4.006E21;

M\_Makemake = 4.4E21;

M\_Eris = 1.66E22; % Eris-Dysnomia system mass

M\_Moon = 7.349E22;

M\_Phobos = 1.08E16;

M\_Deimos = 1.80E15;

M\_Io = 8.933E22;

M\_Europa = 4.797E22;

M\_Ganymede = 1.4819E23;

M\_Callisto = 1.0759E23;

M\_Metis = 3.6E16;

M\_Adrastea = 2E15; % Estimate due to average density

M\_Amalthea = 2.08E18;

M\_Thebe = 4.3E17;

M\_Mimas = 3.75E19;

M\_Enceladus = 1.0805E20;

M\_Tethys = 6.176E20;

M\_Dione = 1.09572E21;

M\_Rhea = 2.309E21;

M\_Titan = 1.34553E23;

M\_Hyperion = 1.08E19; % +/-0.5

M\_Iapetus = 1.8059E21;

M\_Ariel = 1.353E21; % +/-1.2

M\_Umbrel = 1.172E21; % +/-1.35

M\_Titania = 3.527E21; % +/-0.9

M\_Oberon = 3.014E21; % +/-0.75

M\_Miranda = 6.59E19; % +/-0.75

M\_Triton = 2.147E22;

M\_Larissa = 4.2E18;

M\_Proteus = 4.4E19;

M\_Charon = 1.53E21;

M\_Nix = 4.5E16; % +/-4.0

M\_Hydra = 4.8E16; % +/-4.2

M\_Kerberos = 1.65E16;

M\_Styx = 7.5E15;

M\_Halley = 2.2E14;

M\_67P = 9.982E12;

M\_Starman = 1250;

M\_ISS = 419725;

M\_HST = 11110;

M\_Chandra = 5860;

M\_XMMNewton = 3764;

M\_EarthBary = 6.04568E24;

M\_MarsBary = 6.418500126E23;

M\_JupiterBary = 1.898523083E27;

M\_Saturn\_Bary = 5.684595376E26;

M\_UranusBary = 8.68194319E25;

M\_NeptuneBary = 1.024315182E26;

M\_PlutoBary = 1.4600117E22;

% Sun, planets, Pluto, Moon, Martian satellites, Io, Europa, Saturnian satellites, Uranian satellites, Triton, Charon, Starman: https://ssd.jpl.nasa.gov/horizons.cgi

% Ceres: https://nssdc.gsfc.nasa.gov/planetary/factsheet/asteroidfact.html

% Haumea: wikipedia

% Eris: http://hubblesite.org/pubinfo/pdf/2007/24/pdf.pdf

% Ganymede, Callisto: https://nssdc.gsfc.nasa.gov/planetary/factsheet/joviansatfact.html

% Amalthea group: wikipedia

% Larissa and Proteus: wikipedia

% Nix: wikipedia

% Hydra: wikipedia

% Kerberos: wikipedia

% Halley: wikipedia

% Styx: wikipedia

% 67P/Churuymov-Gerasimenko: wikipedia

% ISS: https://www.nasa.gov/feature/facts-and-figures

% HST: http://hubblesite.org/the\_telescope/hubble\_essentials/quick\_facts.php

% Chandra: "Chandra X-ray Observatory Quick Facts". Marshall Space Flight Center. Retrieved 2017-09-16.

% XMM-Newton: Wilson, Andrew (June 2005). "XMM-Newton". ESA Achievements (PDF) (3rd ed.). European Space Agency. pp. 206–209. ISBN 92-9092-493-4. ESA Publication BR-250.

Masses of Vesta, Pallas, Orcus, Salacia, Varuna and Quaoar are in their initial data files