#kepler
'global
%Source "Keplerian Elements for Approximate Positions of the Major Planets" by E. M. Standish form Solar System Dynamics Group at JPL / Caltech"
%Source for m an R: "http://nssdc.gsfc.nasa.gov/planetary/factsheet/planet_table_ratio.html" (30/05/16)

ColisionModel   COMBINE

%Unit: AU^3 M_E^-1 cty^-2
% 1.1842402&
GravitationalConstant   11842.402

IncrementsPerTimeUnit   365000
msToTimeUnitConversionFactor   0.000001

Scale_l 0.001
Scale_s 0.1
Scale_m 0.05 %unused

% KEPLERPOS DIFFEQ
RenderingMethod KEPLERPOS

CurrentTime 0.0

VilocityVectorLengthScale   0.00009

'data

Name	ID	is Light	size [s,m,l]	m [M_E]	R [R_E]	r [1]	g [1]	b [1]	a [au]	da/dt [au/cty]	e [1]	de/dt [1/cty]	I [deg]	dI/dt [deg/cty]	L [deg]	dL/dt [deg/cty]	omega_bar [deg]	d omega_bar / dt [deg/cty]	Omega [deg]	d Omega / dt [deg/cty]
Sun	42	true	l	332946	218	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mercury	1	false	s	0.0553	0.383	1.0	0.5	0.0	0.38709927	0.00000037	0.20563593	0.00001906	7.00497902	-0.00594749	252.25032350	149472.67411175	77.45779628	0.16047689	48.33076593	-0.12534081
Venus	2	false	s	0.815	0.949	0.0	0.5	1.0	0.72333566	0.00000390	0.00677672	-0.00004107	3.39467605	-0.00078890	181.97909950	58517.81538729	131.60246718	0.00268329	76.67984255	-0.27769418
EM_Bary	3	false	s	1	1	0.5	0.5	1.0	1.00000261	0.00000562	0.01671123	-0.00004392	-0.00001531	-0.01294668	100.46457166	35999.37244981	102.93768193	0.32327364	0.0	0.0
Mars	4	false	s	0.107	0.532	1.0	0.25	0.25	1.52371034	0.00001847	0.09339410	0.00007882	1.84969142	-0.00813131	-4.55343205	19140.30268499	-23.94362959	0.44441088	49.55953891	-0.29257343
Jupiter	5	false	s	317.8	11.21	0.5	0.25	0.25	5.20288700	-0.00011607	0.04838624	-0.00013253	1.30439695	-0.00183714	34.39644051	3034.74612775	14.72847983	0.21252668	100.47390909	0.20469106
Saturn	6	false	s	95.2	9.45	0.5	0.5	0.5	9.53667594	-0.00125060	0.05386179	-0.00050991	2.48599187	0.00193609	49.95424423	1222.49362201	92.59887831	-0.41897216	113.66242448	-0.28867794
Uranus	7	false	s	14.5	4.01	0.25	0.25	0.25	19.18916464	-0.00196176	0.04725744	-0.00004397	0.77263783	-0.00242939	313.23810451	428.48202785	170.95427630	0.40805281	74.01692503	0.04240589
Neptune	8	false	s	17.1	3.88	0.0	0.0	1.0	30.06992276	0.00026291	0.00859048	0.00005105	1.77004347	0.00035372	-55.12002969	218.45945325	44.96476227	-0.32241464	131.78422574	-0.00508664
Pluto	9	false	s	0.0025	0.186	0.5	0.5	0.0	39.48211675	-0.00031596	0.24882730	0.00005170	17.14001206	0.00004818	238.92903833	145.20780515	224.06891629	-0.04062942	110.30393684	-0.01183482