### The Sun

Name	Mean radius (km)	Mass (kg)	Gravitational parameter (m³/s²)	Mean density (kg/m³)	Surface gravity (g)	Escape velocity (m/s)	Luminosity (W)	Effective temperature (K)	Spectral type
Ciro	70,980	1.9106E+28	1.2751E+18	12,755	25.809	189,552	3.3422E+24	5,524	about G6

Scaled up to life-sized proportions, Ciro compares to our sun as follows: 1.02 solar radii, 0.96 solar masses, and 0.87 solar luminosities.

#### The Planets - Bulk Parameters

Name	Mean radius (km)	Mass (kg)	Gravitational parameter (m³/s²)	Mean density (kg/m³)	Surface gravity (g)	Escape velocity (m/s)	GSO altitude (km)	Sphere of influence (km)	Albedo 	Solar irradiance (W/m²)	Black body temperature (K)
Icarus	160	6.0185E+20	4.0168E+10	35,078	0.160	709	N/A	3,491	0.20	21,760	526.3
Thalia	270	3.2135E+21	2.1447E+11	38,976	0.300	1,260	2,772	13,644	0.15	5,440	377.9
Niven	400	1.1755E+22	7.8453E+11	43,848	0.500	1,981	2,935	34,382	0.20	2,418	303.9
Gael	600	5.2897E+22	3.5304E+12	58,464	1.000	3,430	2,863	83,666	0.35	1,360	249.9
Tellumo	1,000	2.7918E+23	1.8633E+13	66,649	1.900	6,105	10,612	260,404	0.30	531	201.2
Gratian	550	3.3336E+22	2.2249E+12	47,834	0.750	2,844	9,750	194,760	0.40	173	146.4
Otho	3,500	1.6560E+24	1.1052E+14	9,221	0.920	7,947	15,730	1,725,042	0.40	50.3	107.4
Gauss	2,500	9.4590E+23	6.3130E+13	14,452	1.030	7,107	15,660	2,651,641	0.50	13.6	74.0
Nero	5,000	3.5632E+24	2.3781E+14	6,805	0.970	9,753	16,139	8,834,188	0.50	3.54	52.9
Hox	250	1.2857E+21	8.5808E+10	19,644	0.140	829	1,840	567,481	0.35	1.51	45.6
Leto	210	7.7759E+20	5.1897E+10	20,045	0.120	703	640	600,214	0.60	0.903	35.5

### The Planets - Orbital Parameters

				Longitude of			Synodic	Sidereal	
		Orbital	Orbital	ascending	Argument	Sidereal	orbital	rotation	
Name	Semimajor axis	eccentricity	inclination	node	of periapsis	orbital period	period	period	Solar day
	(km)		(degrees)	(degrees)	(degrees)	(days)	(days)	(hours)	(hours)
Icarus	3,496,090	0.100	6.0	50	340	53.3	60.9	213.0	639.0
Thalia	6,992,180	0.010	3.0	80	10	150.6	233.0	20.00	20.45
Niven	10,488,300	0.030	1.0	60	0	276.7	789.5	12.00	12.09
Gael	13,984,360	0.000	0.0	90	300	426.0	n/a	5.986	6.000
Tellumo	22,375,000	0.020	1.5	70	20	862.2	842.1	16.00	16.05
Gratian	39,156,200	0.060	2.0	100	50	1,996	541.6	38.68	38.80
Otho	72,718,700	0.040	1.5	80	40	5,051	465.2	14.00	14.01
Gauss	139,844,000	0.030	2.0	110	340	13,471	439.9	17.00	17.00
Nero	274,093,000	0.050	1.0	90	60	36,965	431.0	11.00	11.00
Hox	419,531,000	0.150	5.0	120	90	69,999	428.6	18.00	18.00
Leto	542,593,000	0.100	10.0	100	80	102,957	427.8	6.000	6.000

# Planetary Satellites - Bulk Parameters

Name	Mean radius (km)	Mass (kg)	Gravitational parameter (m³/s²)	Mean density (kg/m³)	Surface gravity (g)	Escape velocity (m/s)	Sphere of influence (km)	Albedo 	Solar irradiance (W/m²)	Black body temperature (K)
Satellites of Thalia										
Eta	60	2.6449E+19	1.7652E+09	29,232	0.050	243	1,657	0.30	5,440	360.0
Satellites of Gael										
lota	100	1.2490E+20	8.3357E+09	29,817	0.085	408	2,491	0.45	1,360	239.6
Ceti	150	4.4632E+20	2.9788E+10	31,571	0.135	630	8,144	0.35	1,360	249.9
Satellites of Tellumo										
Lili	7	4.3199E+16	2.8832E+06	30,067	0.006	28.7	17	0.20	531	208.1
Satellites of Gratian										
Geminus	230	1.7100E+21	1.1413E+11	33,553	0.220	996	3,140	0.50	173	139.8
Satellites of Otho										
Augustus	350	6.2999E+21	4.2046E+11	35,078	0.350	1,550	2,153	0.40	50.3	107.4
Hephaestus	125	1.8367E+20	1.2258E+10	22,450	0.080	443	838	0.40	50.3	107.4
Jannah	105	1.0530E+20	7.0277E+09	21,715	0.065	366	1,362	0.40	50.3	107.4
Satellites of Gauss										
Loki	180	4.7607E+20	3.1774E+10	19,488	0.100	594	887	0.40	13.6	77.4
Catullus	1,200	1.9043E+23	1.2709E+13	26,309	0.900	4,602	30,021	0.40	13.6	77.4
Tarsiss (orbits Catullus)	320	2.5579E+21	1.7071E+11	18,635	0.170	1,033	1,070	0.30	13.6	80.5
Satellites of Nero										
Hadrian	300	2.3804E+21	1.5887E+11	21,047	0.180	1,029	1,611	0.20	3.54	59.4
Narisse	90	4.7607E+19	3.1774E+09	15,590	0.040	266	539	0.55	3.54	51.5
Muse	130	1.9866E+20	1.3259E+10	21,587	0.080	452	1,591	0.60	3.54	50.0
Minona	120	1.2695E+20	8.4729E+09	17,539	0.060	376	2,244	0.35	3.54	56.4
Satellites of Hox										
Argo	80	3.2914E+19	2.1967E+09	15,347	0.035	234	2,885	0.50	1.51	42.7

## Planetary Satellites - Orbital Parameters

				Longitude of		Sidereal	Synodic
	Semimajor	Orbital	Orbital	ascending	Argument	orbital	orbital
Name	axis	eccentricity	inclination	node	of periapsis	period	period
	(km)		(degrees)	(degrees)	(degrees)	(days)	(days)
Satellites of Thalia							
Eta	11,300	0.060	2.0	180	350	23.86	28.35
Satellites of Gael							
lota	28,000	0.000	0.0	90	300	22.94	24.24
Ceti	55,000	0.050	9.0	90	300	63.15	74.14
Satellites of Tellumo							
Lili	1,455	0.000	0.0	0	0	0.118	0.118
Satellites of Gratian							
Geminus	10,300	0.025	3.0	60	30	6.45	6.47
Satellites of Otho							
Augustus	20,000	0.005	1.0	60	60	2.47	2.48
Hephaestus	32,000	0.010	0.5	100	350	5.01	5.01
Jannah	65,000	0.075	6.0	80	70	14.50	14.54
Satellites of Gauss							
Loki	18,500	0.020	4.0	130	300	2.91	2.91
Catullus	57,000	0.000	1.0	90	20	15.76	15.77
Tarsiss (orbits Catullus)	6,000	0.000	0.0	90	20	1.20	1.20
Satellites of Nero							
Hadrian	30,000	0.010	0.5	60	80	3.10	3.10
Narisse	48,000	0.015	1.0	100	20	6.27	6.27
Muse	80,000	0.005	0.0	80	100	13.50	13.50
Minona	135,000	0.020	1.5	120	40	29.59	29.61
Satellites of Hox							
Argo	12,500	0.000	40.0	90	90	43.89	43.91

## **Atmospheric Properties**

								Mean		
			Surface	Surface	Scale height	Mean surface	Range of	molecular	Adiabatic	
Name	Height	Total mass	pressure	density	at surface	temperature	temperature	weight	index	Principal composition
	(km)	(kg)	(atm)	(kg/m³)	(km)	(K)	(K)	(g/mol)		
Ciro	1,600	2.53E+18	0.10	0.0003	111.7	5,524	0	1.3	1.67	hydrogen, helium
Niven	65	4.99E+15	0.12	0.19	10.3	325	91	43.0	1.30	carbon dioxide, nitrogen
Gael	70	4.67E+16	1.00	1.23	6.7	288	57	28.9644	1.40	nitrogen, oxygen
Tellumo	45	6.83E+17	10.00	12.95	3.4	273	27	29.0	1.40	nitrogen, oxygen
Gratian	50	2.62E+16	0.50	1.13	4.9	157	34	29.0	1.40	nitrogen
Otho	600	2.59E+19	15.00	1.85	72.8	237	0	2.4	1.44	hydrogen, helium
Augustus	60	4.54E+15	0.10	0.30	7.8	113	21	28.0	1.40	nitrogen
Gauss	400	1.18E+19	15.00	2.27	52.9	209	0	2.6	1.44	hydrogen, helium
Catullus	280	1.04E+18	5.00	1.80	25.6	95	6	2.8	1.44	hydrogen, helium
Tarsiss	130	1.09E+17	1.40	5.01	13.6	92	4	27.0	1.40	nitrogen, methane
Nero	560	5.02E+19	15.00	1.48	86.5	272	0	2.2	1.44	hydrogen, helium
Hadrian	80	2.60E+16	0.40	2.10	8.7	65	8	28.0	1.40	nitrogen
Hox	40	5.80E+14	0.01	0.074	8.0	46	9	28.0	1.40	nitrogen