

Universe number 1
System number 60

max. habitability **8**
 max. affinity **9**

Name of star **Epsilon Eridani**

system number **60**

class of star **G6 V**

mass **0.9** M(sol)

luminosity **0.481** L(sol)

age **0.8** billion years

diameter **0.007** a.u.

row number	ID #	orbit radius (a.u.) (10,000 km)	world type	size (Earth dia.)	mass (Earth masses)	g (Earth g.)	atmosphere	hydrographics	temp (C)	climate	solar day (hours)	HI	RVM	Affinity
1	I	0.09	medium gas giant	12	400	3.0	superdense corrosive				infinite			
2	II	0.41	medium gas giant	10	250	2.3	superdense corrosive				infinite			
3	III	0.67	standard garden planet	0.93	0.84	0.97	standard breathable	73% water	17	normal	23.6	8	1	9
4	IIIa	40	tiny rock moon	0.14	0.00	0.13	none		1	chilly	882	0	1	1
5	IV	1.1	medium gas giant	11	350	2.8	superdense corrosive				50.8			
6			2 moonlets						-63	frozen		0	-1	-1
7	IVa	43	tiny rock moon	0.35	0.03	0.25	none		-63	frozen	41.6	-1	0	-1
8	IVb	49	small rock moon	0.51	0.08	0.31	none		-65	frozen	50.8	-1	0	-1
9	IVc	57	tiny rock moon	0.16	0.00	0.13	none		-63	frozen	63.4	0	-1	-1
10	IVd	65	tiny rock moon	0.21	0.01	0.15	none		-63	frozen	77.5	0	0	0
11	IVe	74	small rock moon	0.45	0.08	0.36	none		-65	frozen	94.7	-1	0	-1
12			1 moonlet						-63	frozen		0	0	0
13	V	1.9	tiny rock planet	0.22	0.01	0.15	none		-112	frozen	16.7	0	-1	-1
14		2.9	asteroid belt						-141	frozen		0	-1	-1
15	VI	4.9	medium gas giant	10.0	200	2.0	superdense corrosive				39.0			
16			4 moonlets						-172	frozen		0	1	1
17	VIa	64	small ice moon	0.34	0.02	0.20	very dense mildly toxic	50% hydrocarbons	-163	frozen	99.8	-1	0	-1
18	VIb	72	standard ice moon	0.45	0.09	0.45	very thin suffocating		-167	frozen	119	-1	0	-1
19	VIc	79	small ice moon	0.46	0.04	0.18	very dense mildly toxic	60% hydrocarbons	-164	frozen	137	-1	0	-1
20	VI d	88	tiny sulfur moon	0.13	0.00	0.05	none		-193	frozen	161	-2	1	-1
21	VIe	100	tiny ice moon	0.16	0.00	0.06	none		-184	frozen	195	0	0	0
22	VI f	111	tiny ice moon	0.19	0.00	0.08	none		-184	frozen	229	0	0	0
23			2 moonlets						-172	frozen		0	0	0
24	VII	7.9	small gas giant	3.9	15	1.0	superdense corrosive				17.1			
25			7 moonlets						-193	frozen		0	0	0
26	VIIa	39	tiny ice moon	0.26	0.01	0.10	none		-202	frozen	177	0	0	0
27	VIIb	51	tiny ice moon	0.15	0.00	0.08	none		-202	frozen	264	0	0	0
28	VIIc	65	tiny ice moon	0.21	0.00	0.10	none		-202	frozen	376	0	1	1
29			6 moonlets						-193	frozen		0	1	1
30	VIII	13	small gas giant	3.9	15	1.0	superdense corrosive				87.3			
31			8 moonlets						-212	frozen		0	1	1
32	VIIIa	25	standard hadean moon	0.49	0.06	0.25	none		-231	frozen	87.3	0	0	0
33	VIIIb	32	tiny ice moon	0.20	0.00	0.10	none		-219	frozen	130	0	1	1
34	VIIIc	41	small hadean moon	0.31	0.02	0.18	none		-231	frozen	185	0	0	0
35			3 moonlets						-212	frozen		0	-1	-1
36	IX	23	small gas giant	3.9	15	1.0	superdense corrosive				15.5			
37			11 moonlets						-226	frozen		0	0	0
38	IXa	35	tiny ice moon	0.13	0.00	0.05	none		-231	frozen	145	0	-1	-1
39	IXb	59	tiny ice moon	0.20	0.00	0.10	none		-231	frozen	321	0	0	0
40			3 moonlets						-226	frozen		0	0	0

display row #

3

(see system table)

system number 60		world III		<i>Concordia</i>	
Planetology		Population & economy		Society	
class of star G6 V		Habitability 8			
mean distance 0.67 a.u.		Resources abundant RVM 1			
perihelion 0.66 a.u.		Affinity 9			
aphelion 0.68 a.u.		settlement type colony			
axial tilt 23°		carrying capacity 1.1 E+10			
annual period 0.578 years		population 6.3 E+7			
214.5 local days		tech level 11 PR 7			
local day 23.6 hours		per-capita income G\$ 116,400			
standard garden planet		typical wealth average			
diameter 0.93 x Earth's		economic volume G\$ 7.3 E+12			
11897 km		spaceport class			
density 1.0 x Earth's		Government			
5.7 g/cm ³		world unity			
surface gravity 0.97 g.		government type			
9.5 m/s ²		control rating			
escape velocity 11 km/s		Installations			
vulcanism moderate		type PR			
tectonics moderate					
climate normal					
temperature					
average 17 C					
periphelion 20 C					
aphelion 14 C					
illumination 102 % Earth's					
oceans 73%					
composition water					
tidal range 1.5 m					
atmosphere					
main gases N2, O2					
traces &c.					
class breathable					
pressure 1.00 bar					
(standard)					
Sky objects	apparent:	size	period	tides	
class		(degrees)	(hours)	(m)	
sun: G6 V		0.61	23.6	1.3	
IIIa: tiny rock moon		0.26	24.3	0.19	

GURPS Space

advanced world-building sequence

user controls

Personal user number	1	enter a counting number (i.e. a positive integer)
use US Customary units?	FALSE	enter TRUE for US units, FALSE for Metric
campaign technology level	11	

Base carrying capacity at very high TL	
TL	Base carrying capacity
8	million
9	million
10	million
11	25 million
12	30 million

User-specified stellar characteristics

number of stars	1	Insert 1, 2, or 3, or leave blank for a random result
age of system	0.8	Insert the system age in billions of years, or leave blank for a random result
mass of primary star	0.9	Insert the mass of the primary star in solar masses, or leave blank for a random result
class of primary star	G6 V	The stellar class is calculated from mass and age. You cannot alter it.
luminosity of primary star	0.48	The star's luminosity is calculated from mass and age. You cannot alter it.
mass of [nearer] companion		Insert the mass of a companion star in solar masses, or leave blank for a random result
class of [nearer] companion		The stellar class is calculated from mass and age. You cannot alter it.
luminosity of [nearer] companion		The star's luminosity is calculated from mass and age. You cannot alter it.
radius of 1st companion's orbit		Insert the semimajor axis of the nearer companion's orbit in AU, or leave blank for a random result
eccentricity of 1st companion's orbit		Insert the eccentricity of the nearer companion's orbit, on a scale of 0 to 1, not including 1, or leave blank for a random result
periapsis of 1st companion		Insert the periapsis of the 1st companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
apapsis of 1st companion		Insert the apapsis of the 1st companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
mass of further companion		Insert the mass of the primary star in solar masses, or leave blank for a random result
class of further companion		The stellar class is calculated from mass and age. You cannot alter it.
luminosity of further companion		The star's luminosity is calculated from mass and age. You cannot alter it.
radius of 2nd companion's orbit		Insert the semimajor axis of the further companion's orbit in AU, or leave blank for a random result
eccentricity of 2nd companion's orbit		Insert the eccentricity of the further companion's orbit, on a scale of 0 to 1, not including 1, or leave blank for a random result
periapsis of 2nd companion		Insert the periapsis of the 2nd companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
apapsis of 2nd companion		Insert the apapsis of the 2nd companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
arrangement of gas giants	epistellar	Insert "none", "conventional", "epistellar", or "eccentric", or leave blank for a random result
radius of orbit of first gas giant		Insert the semimajor axis of the first gas giant's orbit in AU, or leave blank for a random result. Will over-ride 'arrangement of gas giants'.
eccentricity of orbit of first gas giant		Insert the eccentricity of the first gas giant's orbit, on a scale of 0 to 1, not including 1, or leave blank for a random result. Will over-ride 'arrange

User-specified planet

world type	standard	Insert "asteroid belt", "tiny", "small", "standard", or "large", or leave blank for a random system.
subtype	garden	Insert "hadean", "ammonia", "ice", "ocean", "garden", "greenhouse" or "chthonian"
complete world type	standard garden	This value is calculated. You cannot alter it.
primordial atmospheric mass	1.03	Insert relative atmospheric mass (about 0.5 to 1.5). May be diminished by tide-locking.
basic atmosphere	breathable	This value is calculated. You cannot alter it.
worse atmosphere?	FALSE	Insert TRUE for marginal atmosphere, else FALSE or leave blank
atmospheric composition	breathable	This value is calculated. You cannot alter it.
marginal condition number		Insert the number of a marginal condition from the table on the right
marginal condition		This value is calculated. You cannot alter it.
primordial hydrographic coverage	73	Insert hydrographic % between 50 and 100
average surface temperature	290	Insert temperature between 250 and 340 Kelvins
that's	17	Celsius
climate	normal	This value is calculated. You cannot alter it.
blackbody temperature	283	This value is calculated. You cannot alter it.
density	1.04	Insert density between 0.8 and 1.2 times Earth's
diameter	0.93	This value is calculated. Adjust it using density and surface gravity.
surface gravity	0.97	Insert surface gravity between 0.5 and 1.07 times Earth's
mass	0.84	times Earth's. This value is calculated, you cannot alter it.
atmospheric pressure	1.00	times Earth's. This figure is calculated. To adjust it, alter atmospheric mass.
orbital radius	0.67	Astronomical units. This figure is calculated. You cannot alter it.
orbital eccentricity	0.02	
obliquity (axial tilt)	23	(degrees)
primordial day length	19	Insert the original day length (before tidal braking) in hours. About 6 to 40, average about 12.
number of major moons	1	0, 1, or 2. Or leave blank for a random result.
number of moonlets		0, 1, or 2. This value will be over-riden if number of major moons is not blank or zero.
type of moon	tiny	Insert a world type no larger than that of the planet (tiny, small, standard, or large), or leave blank for a random result.
distance of moon		(planetary diameters). No less than 5. No more than 40.
resource value modifier	1	Insert resource value between -2 and 2
vulcanism	moderate	Insert "none", "light", "moderate", "heavy", or "extreme", or leave blank for a random result.
tectonics	moderate	Insert "none", "light", "moderate", "heavy", or "extreme", or leave blank for a random result.

number	marginal condition
1	Cl, F
2	sulfur compounds
3	NOx
4	organic toxins
5	low O2
6	pollutants
7	high CO2
8	high O2
9	inert gases