

Universe number 1
System number 56

max. habitability **7**
 max. affinity **6**

Name of star **Gliese 581 / Wolf 562**

system number **56**

class of star **M4 V**

mass **0.31** M(sol)
 luminosity **0.024** L(sol)
 age **7.0** billion years
 diameter **0.004** 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	9.2	150	1.8	superdense corrosive				906			
2			1 moonlet						73	infernal		0	0	0
3	II	0.18	standard garden planet	1.6	3.4	1.3	dense marginal	49% water	-4	chilly	infinite	7	-1	6
4	IIa	21	tiny rock moon	0.27	0.01	0.19	none		-21	very cold	160	0	-1	-1
5		0.33	asteroid belt						-88	frozen		0	-1	-1
6	III	0.56	medium gas giant	9.2	150	1.8	superdense corrosive				infinite			
7			2 moonlets						-131	frozen		0	0	0
8	IV	0.95	small gas giant	3.9	15	1.0	superdense corrosive				18.3			
9			8 moonlets						-164	frozen		0	-1	-1
10	V	1.9	small gas giant	5.4	30	1.0	superdense corrosive				20.1			
11			8 moonlets						-196	frozen		0	0	0
12	Va	46	tiny ice moon	0.06	0.00	0.02	none		-205	frozen	156	0	-2	-2
13			5 moonlets						-196	frozen		0	1	1
14	VI	3.4	small gas giant	2.9	10	1.2	superdense corrosive				49.2			
15			10 moonlets						-216	frozen		0	0	0
16	VIa	15	small hadean moon	0.32	0.02	0.16	none		-233	frozen	49.2	0	0	0
17	VIb	17	small hadean moon	0.34	0.02	0.14	none		-233	frozen	62.3	0	0	0
18	VIc	21	tiny sulfur moon	0.10	0.00	0.04	none		-227	frozen	83.6	-2	0	-2
19	VIId	25	tiny ice moon	0.11	0.00	0.03	none		-222	frozen	109	0	0	0
20			4 moonlets						-216	frozen		0	0	0
21	VII	5.8	medium gas giant	12	450	3.2	superdense corrosive				18.7			
22			7 moonlets						-229	frozen		0	0	0
23	VIIa	60	tiny sulfur moon	0.11	0.00	0.06	none		-238	frozen	61.4	-1	0	-1
24	VIIb	72	tiny ice moon	0.15	0.00	0.08	none		-234	frozen	79.7	0	1	1
25	VIIc	83	small hadean moon	0.26	0.01	0.13	none		-243	frozen	99.3	0	0	0
26	VIIId	95	tiny ice moon	0.21	0.00	0.10	none		-234	frozen	121	0	-1	-1
27	VIIe	107	small hadean moon	0.26	0.01	0.13	none		-243	frozen	145	0	0	0
28			5 moonlets						-229	frozen		0	0	0
29	VIII	8.7	medium gas giant	11	300	2.6	superdense corrosive				22.2			
30			8 moonlets						-237	frozen		0	-1	-1
31	VIIIa	157	tiny sulfur moon	0.09	0.00	0.04	none		-245	frozen	314	-2	2	0
32			1 moonlet						-237	frozen		0	0	0

display row #

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(see system table)

system number 56	world II	<i>Zarmina ("Gee")</i>
Planetology	Population & economy	Society
class of star M4 V	Habitability 7	
mean distance 0.18 a.u.	Resources poor RVM -1	
perihelion 0.16 a.u.	Affinity 6	
aphelion 0.20 a.u.	settlement type colony	
axial tilt 20°	carrying capacity 2.4 E+9	
annual period 0.134 years	population 1.1 E+7	
tidelocked	tech level 9 PR 7	
local day infinite	per-capita income G\$ 38,700	
standard garden planet	typical wealth struggling	
diameter 1.6 x Earth's	economic volume G\$ 4.1 E+11	
20729 km	spaceport class	
density 0.80 x Earth's	Government	
4.4 g/cm ³	world unity	
surface gravity 1.3 g.	government type	
escape velocity 13 m/s ²	control rating	
vulcanism moderate	Installations	
tectonics moderate	type PR	
climate chilly		
temperature		
average -4 C		
dayside 20 C		
nightside -36 C		
illumination 8 % Earth's		
oceans 49%		
composition water		
tidal range 16 m		
atmosphere		
main gases N2, O2		
traces &c. low O2		
class marginal		
pressure 1.4 bar		
(dense)		
Sky objects	apparent: size period tides	
class	(degrees) (hours) (m)	
sun: M4 V	1.4 infinite	
IIa: tiny rock moon	0.95 -159.901 16	

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	7	Insert the system age in billions of years, or leave blank for a random result
mass of primary star	0.31	Insert the mass of the primary star in solar masses, or leave blank for a random result
class of primary star	M4 V	The stellar class is calculated from mass and age. You cannot alter it.
luminosity of primary star	0.02	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		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	1.1	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?	TRUE	Insert TRUE for marginal atmosphere, else FALSE or leave blank
atmospheric composition	marginal	This value is calculated. You cannot alter it.
marginal condition number	5	Insert the number of a marginal condition from the table on the right
primordial hydrographic coverage	low O2	This value is calculated. You cannot alter it.
average surface temperature	59	Insert hydrographic % between 50 and 100
that's	269	Insert temperature between 250 and 340 Kelvins
climate	-4	Celsius
blackbody temperature	chilly	This value is calculated. You cannot alter it.
density	260	This value is calculated. You cannot alter it.
diameter	0.8	Insert density between 0.8 and 1.2 times Earth's
surface gravity	1.63	This value is calculated. Adjust it using density and surface gravity.
mass	1.3	Insert surface gravity between 0.55 and 1.17 times Earth's
atmospheric pressure	3.43	times Earth's. This value is calculated, you cannot alter it.
orbital radius	1.43	times Earth's. This figure is calculated. To adjust it, alter atmospheric mass.
orbital eccentricity	0.18	Astronomical units. This figure is calculated. You cannot alter it.
obliquity (axial tilt)	0.12	(degrees)
primordial day length	20	Insert the original day length (before tidal braking) in hours. About 6 to 40, average about 12.
number of major moons	12	0, 1, or 2. Or leave blank for a random result.
number of moonlets	1	0, 1, or 2. This value will be over-ridden 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	10	(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