

## File description for It's Full of Stars

### Foreword

It is important to mention that this description was made for the new version 1.2 released 9<sup>th</sup> august. If you use an older version you must include the giant constructions data in every system, but otherwise it should work.

One system with no data now takes 196 bytes. This is because it only stores the giant construction fields if they are actually used.

Adding data to the system will only increase the data size slightly. Adding planets is of course another matter. One planet will take a minimum of 339 bytes, more with data. Also the files are text files so compressing them should reduce the size with 5 to 10 times, or more.

Last I would like to mention that I never intended the save files to be altered manually. Therefore there is little safety when a save file is loaded. If you have done something wrong then the program will crash! If you want to convert a star map to the "str" format it will be easy, since you can ignore all planetary fields.

Last but not least. If you have read all this but still don't know what to do, feel free to mail me and ask any questions. You can also send any star maps you have converted or created to this adress: clausbo@hotmail.com

### Description

IMPORTANT! Only fields including the S/#1 up to and including #49 is required.

The thumb rule is as follows. Each system begins with an S, each planet, moon, station begins with a P followed by a incremented number. (i.e. P0, then P1, P2, and so on). Each field is always seperated by a backslash, /. No field may be excluded and every field must contain the right form of data.

Also every field which belongs on one line must stay on one line. You must follow the format below exactly. Deviating from it will result in a crash!

```
S/#1/#2/#3/#4/#5/#6/#7/#8/#9/#10/#11/#12/#13/#14/#15/#16/  
#17  
#18/#19/#20/#21/#22/#23/#24/#25/#26/#27/#28/#29/#30/#31/#32/#33/  
#34/#35/#36/#37/#38/#39/#40/#41/#42/#43/#44/#45/#46/#47/#48/#49/  
P0/#50/#51/#52/#53/#54/#55/#56/#57/#58/#59/#60/#61/#62/#63/#64/#65/#66/#67/#68/#69/  
#70  
#71/#72/#73/#74/#75/#76/#77/#78/#79/#80/#81/#82/#83/#84/  
#85/#86/#87/#88/#89/#90/#91/#92/#93/#94/#95/#96/#97/#98/  
#99  
#100/#101/#102/#103/#104/  
#105/#106/#107/#108/#109/#110/#111/#112/  
#113  
#114  
#115/#116/#117/#118/#119/#120/#121/#122/#123/#124/#125/  
P1/#50/#51/#52/#53/#54/#55/#56/#57/#58/#59/#60/#61/#62/#63/#64/#65/#66/#67/#68/#69/  
#70
```

#71/#72/#73/#74/#75/#76/#77/#78/#79/#80/#81/#82/#83/#84/  
 #85/#86/#87/#88/#89/#90/#91/#92/#93/#94/#95/#96/#97/#98/  
 #99  
 #100/#101/#102/#103/#104/  
 #105/#106/#107/#108/#109/#110/#111/#112/  
 #113  
 #114  
 #115/#116/#117/#118/#119/#120/#121/#122/#123/#124/#125/  
 P2/#50/#51/#52/#53/#54/#55/#56/#57/#58/#59/#60/#61/#62/#63/#64/#65/#66/#67/#68/#69/  
 #70  
 #71/#72/#73/#74/#75/#76/#77/#78/#79/#80/#81/#82/#83/#84/  
 #85/#86/#87/#88/#89/#90/#91/#92/#93/#94/#95/#96/#97/#98/  
 #99  
 #100/#101/#102/#103/#104/  
 #105/#106/#107/#108/#109/#110/#111/#112/  
 #113  
 #114  
 #115/#116/#117/#118/#119/#120/#121/#122/#123/#124/#125/  
 and so on .....

All the above is not required for adding a system. Only up to and including #49 is required for a complete system. P0 - P2 are the only that can be and must be Giant Constructs. P0 is the giant construct for the main sun, P1 for the secondary sun, and P2 for the third sun. If you want no Giant constructs, but would like planets start at P3. Always include all data for the planet, of course. If you would like to add a station do exactly as you would do with a planet, but some fields may be used differently (see below).

For additional planets and moons just keep adding P# with the correct data. OBS : It is important that moons come after the planet which they orbit around.

**Fields :**

Length is given in number of characters, if not otherwise stated.  
 Also an empty numerical field must contain atleast a zero. An empty string field can have no characters (i.e. S/ / /0/0/, would mean two empty string fields followed by two zero numerical fields).

ID	Field	Type	Length	Notes
<i>Main Star</i>				
#1	Constellation	String	10	
#2	Controlling Entity	String	16	F.Eks. Humans, Idorians, etc.
#3	X - Coordinate	Float	5	-, and . count as characters
#4	Y - Coordinate	Float	5	i.e. -9.99 is 5 characters.
#5	Z - Coordinate	Float	5	
#6	Dyson Sphere	Bool	1	
#7	Dyson Sphere Type 2	Bool	1	
#8	Not used			Must be 0
#9	Mass	Float	7	
#10	Main Star Name	String	16	
#11	Niven Ring	Bool	1	
#12	Not Used			Must be 0
#13	Not Used			Must be 0

#14	Spectral Class	Char	1	O, B, A, F, G, K, M or 0 for no spectral class.
#15	Stellar Type	Int	-	0 : No Sun 1 : Dwarf 2 : Sub Dwarf 3 : Main Sequence 4 : Sub Giant 5 : Giant 6 : Bright Giant 7 : Super Giant 8 : Neutron 9 : Black Hole <b>Outstations</b> 500 : SPHERE 501 : TORUS 502 : CYLINDER 503 : DISK_CYLINDER 504 : NO_GRAV
#16	System Name	String	16	
#17	System Description	String	150	
<i>Secondary Sun</i>				
#18	Not Used			Leave Empty
#19	Not Used			Leave Empty
#20	Not Used			Must be 0
#21	Not Used			Must be 0
#22	Not Used			Must be 0
#23	Dyson Sphere	Bool	1	
#24	Dyson Sphere Type 2	Bool	1	
#25	Distance from main sun	Float	7	Remember “.” counts.
#26	Mass	Float	7	
#27	Star Name	String	16	
#28	Niven Ring	Bool	1	
#29	Rotate y-axis	Float	7	Measured in degrees, so just
#30	Rotate z-axis	Float	7	use 0 - 360.
#31	Spectral Class	Char	1	See above
#32	Stellar Type	Int	-	See above
#33	Not Used			Leave Empty
<i>Third Sun</i>				
#34	Not Used			Leave Empty
#35	Not Used			Leave Empty
#36	Not Used			Must be 0
#37	Not Used			Must be 0
#38	Not Used			Must be 0
#39	Dyson Sphere	Bool	1	
#40	Dyson Sphere Type 2	Bool	1	
#41	Distance from main sun	Float	7	Remember “.” counts.
#42	Mass	Float	7	
#43	Star Name	String	16	
#44	Niven Ring	Bool	1	
#45	Rotate y-axis	Float	7	Measured in degrees, so just
#46	Rotate z-axis	Float	7	use 0 - 360.
#47	Spectral Class	Char	1	See above
#48	Stellar Type	Int	-	See above

#49	Not Used			Leave Empty
<i>Planets and Giant Constructs, P0, P1 and P2 are reserved for Giant Constructs</i>				
#50	Day and Night	Float	7	Remember “.” Counts
#51	Equatorial Radius	Float	7	Km
#52	Density	Float	7	kg / m <sup>3</sup>
#53	Escape Velocity	Float	7	km / s
#54	High Radiation Levels	Bool	1	
#55	High Tectonic Activity	Bool	1	
#56	High Volcanic Activity	Bool	1	
#57	Mass	Float	7	10 <sup>24</sup> kg
#58	Meteor Storms	Bool	1	
#59	Do not orbit sun	Bool	1	0 = Planet, Outstation, Giant Construct 1 = Moon or Instation in orbit around a planet
#60	Name	String	19	
#61	No Axial Tilt	Bool	1	
#62	Orbit Eccentricity	Float	7	
#63	Orbit Radius	Float	7	AU
#64	Rings	Bool	1	
#65	Orbit Start Angle	Float	7	Degrees
#66	Orbit Inclination	Float	7	Degrees
#67	Orbit Speed	Float	7	km / s
#68	Surface Gravity	Float	7	m / s <sup>2</sup>
#69	Type	String	-	<b>Planet Types :</b> BAREN EARTHLIKE GAS-GIANT ARCTIC DESERT OCEAN FOREST INFERNO <b>Station Types :</b> NO_GRAV DISK_CYLINDER CYLINDER TORUS SPHERE <b>Other :</b> GIANT_CONSTRUCT ASTEROIDS
#70	Planet Notes	String	150	
<i>Atmosphere</i>				
#71	Ammonia	Float	4	%
#72	Carbon Dioxide	Float	4	%
#73	Chlorine	Float	4	%
#74	Helium	Float	4	%
#75	Hydrogen	Float	4	%
#76	Methan	Float	4	%
#77	Nitrogen	Float	4	%
#78	Oxygen	Float	4	%
#79	Contaminants	Bool	1	
#80	Ozone in Stratosphere	Bool	1	
#81	Permanent Cloud Cover	Bool	1	
#82	Thin, Normal or Dense	Int	-	0 : No atmosphere

1 : Thin atmosphere  
 2 : Normal atmosphere  
 3 : Dense atmosphere

#83 Toxic trace metals Bool 1  
 #84 Violent Winds Bool 1

*Biosphere*

#85 Has Biosphere Bool 1 0 : No Biosphere  
 1 : Has a biosphere

#86 Advanced Invertebrates Bool 1  
 #87 Advanced Plants Bool 1  
 #88 Advanced Vertebrates Bool 1  
 #89 Biotoxins Bool 1  
 #90 Simple Invertebrates Bool 1  
 #91 Simple Plants Bool 1  
 #92 Simple Vertebrates Bool 1  
 #93 Single Celled Org. Bool 1  
 #94 Wildlife Danger Rating Int 1  
 #95 Not Used Int  
 #96 First Intelligent Race String 18  
 #97 Second Intelligent Race String 18  
 #98 Third Intelligent Race String 18  
 #99 Biology Notes String 150

0-9  
 Must be 0

*Climate*

#100 Average Float 4  
 #101 Max Float 4  
 #102 Min Float 4

*Hydrosphere*

#103 Standing Water Float 4  
 #104 Water Vapor Float 4

*Civilization*

#105 Has Civilization Bool 1 0 : No civilization  
 #106 Appearance String 70  
 #107 Language Int - Default 0  
 #108 Civilization Age Float 11 Decimal values not saved  
 #109 Founder Race String 20  
 #110 Life Span Float 9 Decimal values not save  
 #111 Military structure Int - Default 0  
 #112 Civilization Name String 20 Used as Owner on stations  
 #113 Short History String 140  
 #114 Notes String 140  
 #115 Political Structure Int - Default 0  
 #116 Population Planet Double 15 Used as Crew on stations  
 #117 Population System Double 15 Used as Passangers on stat.  
 #118 Racial Origin String 25  
 #119 Religion Int - Default 0  
 #120 Social Structure Int - Default 0  
 #121 Tech / Science Level Int - Default 0  
 #122 Mental Capacity Int - Default 0  
 #123 Space Travel Speed Float 7  
 #124 Values Int - Default 0

#125 Xeno Tolerance Int - Default 0

PS : String fields. Because some letters take more room than others length in number of letters is not so easy to determine. The lengths suggested above is measured with capital A. Using too long string fields, should not crash the program (unless they are much too long), but the entire text would not be displayed in the program.

### **Important About Outstations :**

Outstations are special in that they have no suns, but yet have status as a system. Therefore if you wish to manually add outstations this will be extra tricky. You must include information not only from #1 to #49, you must also include all of P0 since this is where things like crew, station name and so on can be found.

Its like this :

A number between 500-504 in the stellar\_type field identifies what sort of outstation it is (see above in the list). The coordinates are filled in as normal. System name, main star name and so on are not used.

Under P0, fields like name, climate, mass and so on are used as before. Fields like orbital radius are not used. The civilization fields, population on planet is used for crew, population in system for passengers and civilization name for Owners of the station.

### **Terms :**

String : Any letters forming sentences, words or other. Can include all signs except /.

Char : A single letter.

Int : A integer number. That is a number with no decimals.

Double : A number with decimal value, can be much larger than an Int.

Float : About the same as a double. Don't worry about it.

Bool : A true or false field. Use 1 for True and 0 for False.