Stellar Metamorphosis:
Classification of astrons within 20 light years

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February 3, 2019
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Abstract: The observed stars and planets (astrons[1]) within 20 light years of our solar system are classified according to Stellar Metamorphosis[2]. After the table some notes are provided on certain classifications and explanations on why certain choices were made.

Our local stellar environment contains many stars and much more planets; we have observed all the stars (probably) and only a few of the planets. With all the new more powerful observational tools (like TESS*) we are sure to find many more planets in the coming years. With tools like CHEOPS** and in the future ARIEL*** more characteristics (like chemical composition/type of atmosphere etc) will be observed. These new observations will be of great help to Stellar Metamorphosis to fill in much more detail on how stars/planets evolve, confirm predictions and guide future research. This calls for the classification of stars/planets that we have observed. I chose to limit the classification to whithin 20 light years, it gives a good amount of systems to classify and if/when we start to visit other systems these are the ones we will venture out to so it is good to know what is out there. Also the observations of stars/planets within this distance is more trustworthy. I already made the Astron Classification table[3], so i used that table to classsify all the known stars and planets within 20 light years. This automatically sets up many predictions for every planet within 20 light years, making Stellar Metamorphosis the prime classification method in astronomy.

The legenda is below on page 1, the classication table is on page 2,3 and the notes start from page 4. I have also submitted a printable version of the table to viXra, it is called: "**astrons within 20ly_printable version**".

Legenda:

Blue text = Possibly exists, probable, but unconfirmed
Red text = Ruled out, disconfirmed
Bolded text / highlighted in any color = There is a note on this object, see pages after the table

Distance(ly) = Distance in light years

Time -->		Very Young											Very Old
Population		I				II			III			IV	
Type		White	Yellow	Orange	Red	Brown	Gas Giant	Gas Dwarf	Ocean	Pre-Earth	Life Host	Post Life	Solid
Temperature average in Kelvin (K)		8750	6350	4450	3000	2000	500	-	-	-	-	-	-
Size average in Jupiter radius (R⊕)		15	10	7	5	2	1	0,5	0,27	0,16	0,11	0,06	0,02
System	**Distance(ly)**												
Solar	0		Sol			Planet X	Jupiter + Saturn	Uranus + Neptune			Earth	Venus + Mars	Mercurius + Pluto
Centauri	4,3		α Centauri A	α Centauri B	Proxima Centauri						Proxima Centauri b	α Centauri Bc	
Barnard	5,9				Barnard A					Barnard b			
Luhman 16	6,5					Luhman 16A+B					(Luhman 16Ab)		
WISE 0855–0714	7,2						WISE 0855–0714						
Wolf 359	7,8				Wolf 359								
Lalande	8,3				Lalande 21185								Lalande 21185 b
Sirius	8,6	Sirius A		(Sirius C)							Nyan tolo	**Sirius B**	
Luyten 726-8	8,8				Luyten 726-8A+B								
WISE 1541-2250	9,1					WISE 1541-2250							
Ross 154	9,7				Ross 154								
Ross 248	10,3					Ross 248							
Epsilon Eridani	10,4			Epsilon Eridani			Epsilon Eridani b						Epsilon Eridani c
Lacaille 9352	10,7				Lacaille 9352								
Ross 128	11				Ross 128						**Ross 128 b**		
EZ Aquarii	11,1				EZ Aquarii A+B+C								
WISE 1506-7027	11,1					WISE 1506-7027							
61 Cygni	11,4			61 Cygni A+B			(61 Cygni Ab+Ac+Bb)						
Procyon	11,4	Procyon A									**Procyon B**		
Struve 2398	11,5				Struve 2398 A	Struve 2398 B							
Groombridge 34	11,6				Groombridge 34 A	Groombridge 34 B		Groombridge 34 Ac		Groombridge 34 Ab			
DX Cancri	11,6					DX Cancri							
Tau Ceti	11,7		Tau Ceti							Tua Ceti f	Tau Ceti e + (g+h)		
Epsilon Indi	11,8			Epsilon Indi A		Epsilon Indi Ba + Bb	Epsilon Indi Ab						
SIPS 1259-4336	11,8				SIPS 1259-4336								
GJ 1061	11,9				GJ 1061								
YZ Ceti	12,1					YZ Ceti					YZ Ceti d+c	YZ Ceti b + e	
Luyten's Star	12,2				Luyten's Star					GJ 273b	GJ 273c		
Teegarden's Star	12,5					Teegarden's Star							
SCR 1845-6357	12,6				SCR 1845-6357 A	SCR 1845-6357 B							
Kapteyn's Star	12,8				Kapteyn's Star				Kapteyn c	Kapteyn b			
Lacaille 8760	12,9				Lacaille 8760								
Kruger 60	13				Krueger 60 A	Krueger 60 B							
DEN 1048-3956	13,1					DEN 1048–3956							
Ross 614	13,4				Ross 614A	Ross 614B							
UGPS J0722-0540	13,4						UGPS J0722-0540						
Wolf 1061	14				Wolf 1061				Wolf 1061 d	Wolf 1061 c	Wolf 1061 b		
Wolf 424	14				Wolf 424 A+B								
Van Maanen 2	13,9										**Van Maanen 2**		Van Maanen b
Gliese 1	14,1				Gliese 1								

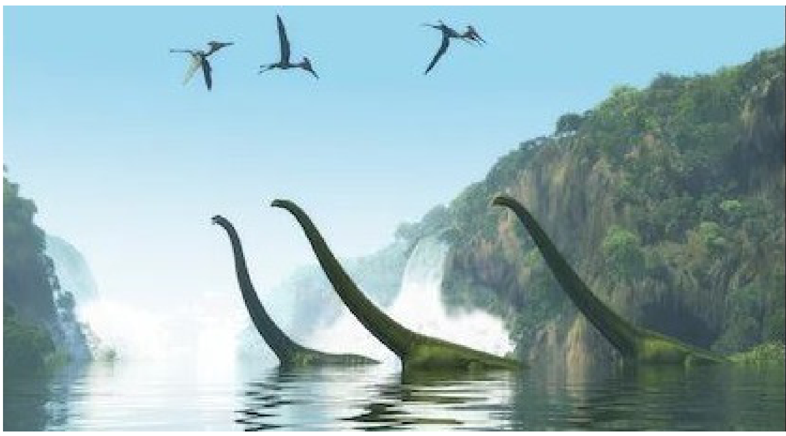
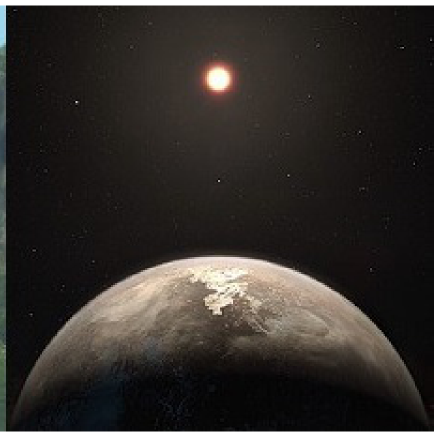
TZ Arietis / L 1159-16	14,6				L 1159-16								
Gliese 674	14,8				Gliese 674				**Gliese 674 b**				
Gliese 687	14,8				Gliese 687			Gliese 687 b					
LHS 292	14,8					LHS 292							
GJ 1245	14,8				GJ 1245 A+B	GJ 1245 C							
LP 145-141	15,1										**LP 145-141**		
Gliese 876	15,2				Gliese 876		Gliese 876 c+b		Gliese 876 e	Gliese 876 d			
LHS 288	15,6				LHS 288		LHS 288 b						
GJ 1002	15,8				GJ 1002								
Groombridge 1618	15,8			Groombridge 1618			Groombridge 1618 b						
Gliese 412	15,8				Gliese 412 A	Gliese 412 B							
DENIS J081730.0-615520	16					DENIS J081730.0-615520							
WISE 1639-6847	16,1					WISE 1639-6847							
DEN 0255-4700	16,2					DEN 0255-4700							
Gliese 832	16,2				Gliese 832		Gliese 832 b			Gliese 832 c			
AD Leonis	16,2				AD Leonis								
GJ 1005	16,2				GJ 1005 A+B								
WISE J0521+1025	16,3					WISE J0521+1025							
40 Eridani	16,5			40 Eridani A	40 Eridani C				40 Eridani b	**40 Eridani B**			
70 Ophiuchi	16,6			70 Ophiuchi A+B									
Altair	16,7	Altair											
2MASS 0939-2448	17,4					2MASS 0939-2448 A	2MASS 0939-2448 B						
WISE 0350-5658	17,7					WISE 0350-5658							
Gliese 251	18				Gliese 251								
WISE 1741+2553	18					WISE 1741+2553							
Stein 2051	18,1				Stein 2051 A						**Stein 2051 B**		
LSR J1835+3259	18,5					LSR J1835+3259							
Gliese 205	18,6				Gliese 205								
WISE 1541–2250	18,6						WISE 1541–2250						
2MASS J04151954-0935066	18,6					2MASS J04151954-0935066							
Gliese 229	18,8				Gliese 229 A		Gliese 229 B	Gliese 229 Ab					
Sigma Draconis	18,8		Sigma Draconis					Sigma Draconis b					
Ross 47	18,9				Ross 47								
Gliese 693	19				Gliese 693								
Gliese 570	19			Gliese 570 A	Gliese 570 B+C	Gliese 570 D							
Gliese 752	19,2				Gliese 752 A	Gliese 752 B	Gliese 752 Bb	Gliese 752 Ab					
L 674-15	19,2				L 674-15								
TYC 3980-1081-1	19,3				TYC 3980-1081-1								
Gliese 588	19,3				Gliese 588								
Gliese 754	19,3				Gliese 754								
Eta Cassiopeiae	19,4		Eta Cassiopeiae A	Eta Cassiopeiae B									
Gliese 908	19,5				Gliese 908								
YZ Canis Minoris	19,5				YZ Canis Minoris								
36 Ophiuchi	19,5			36 Ophiuchi A+B+C									
HR 7703	19,6			HR 7703 A	HR 7703 B								
82 G. Eridani	19,8		82 G. Eridani					82 G. Eridani f		82 G. Eridani d+e	82 G. Eridani b+c+g		
Delta Pavonis	19,9		Delta Pavonis										
2MASSI J0937347+293142	19,96					2MASSI J0937347+293142							

NOTES

A note on the colours used for the Population Types
I used red for Population I (plasma), yellow for Population II (gas), blue for Population III (liquid) and green for Population IV (solid). This is done to match the colours of the 'Platonic Solids', see picture:

The ancients had Fire, Air, Water, Earth and Ether as the elements. My understanding from a young age was that they were not saying that these are the elements matter is made from but that they were saying something about the possible aggregate states of matter; to me this is much more logical. And as explained in my astron classification paper[3], these are just generalizations of which phase an astron is in. You can see the ancients also had Aether, this could either be a super solid, a super plasma or as I think; it is photonic matter (a sea of photons known as the charge field). Photons which are recycled by all other matter in any state, I touched on this in my paper The Charge Engine of Stellar Evolution[4].

A note on Ross 128 b
This astron is just larger than Earth and it is marked extra green in the classification table because it is possibly a dinosaur planet; there are other candidates but this planet is a more archetypical example where creatures like dinosaurs can thrive. This does not mean there are dinosaurs and that it looks like the picture below but at least it is possible. A dinosaur planet in stellar metamorphosis has a very thick atmosphere with a higher pressure, 3 to 5 bar, this higher pressure is what makes it possible for giant creatures like dinosaurs to exist and especially only this pressure range can accommodate the largest flying reptile quetzalcoatlus[5,6]. Dinosaur-like creatures have a natural place to exist only with Stellar Metamorphosis, also with stellar metamorphosis we can predict features about astrons that are not possible with any other paradigm. For Ross 128 it is now predicted we will find oxygen and methane as byproducts of biological life and possibly dinosaur-like life.

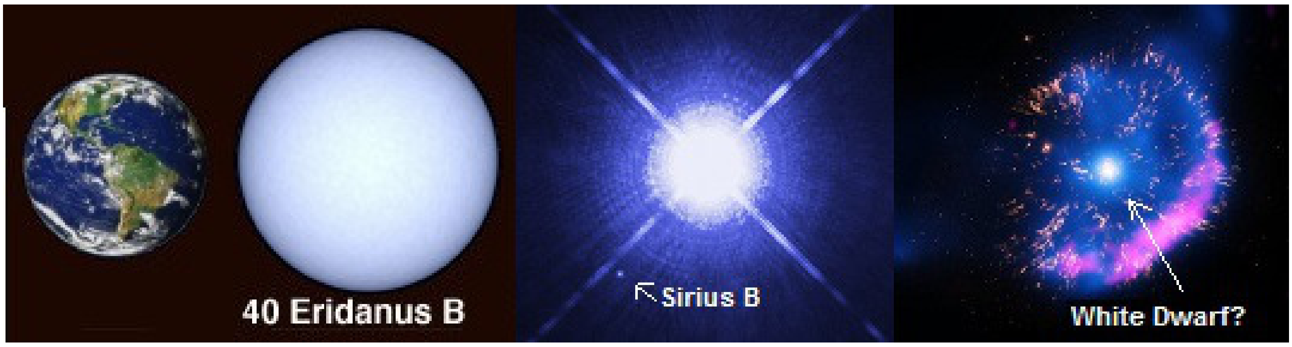



A note on Gliese 974 B

I highlighted this world because in standard astronomy the description has it has either a) rocky or b) gaseous, it is a sub gas dwarf, this makes it an ocean world. An ocean world is not a rocky world, the crust has not yet formed, it is in the process of forming. It does have a gaseous atmoshphere but that is no longer it's main characteristic. It is really in a different phase of evolution compared to a gas dwarf. More detail is in my paper: From Neptune to Earth[7].

A note on 'white dwarf stars'

These objects are said to be stars (plasmatic and shining astrons), they have high temperatures (in a variety of ranges) and apparently shine but are very dim. The real difference with normal stars is that white dwarf stars have a very small radius (compared to normal stars) and in Stellar Metamorphosis the classification of astrons is done generally first by radius. That is why I have placed '**white dwarf stars'** as pre-earth, life host and post-life types based only on the radius that is given for them; this does not mean they are these types of astron. But I do question what exactly these objects are and that is why I made them stand out, because I think these are objects that need further examination. This will be the subject of a future exploratory paper about these objects called: 'What are White Dwarf stars?':



References:

* TESS: https://www.nasa.gov/tess-transiting-exoplanet-survey-satellite
** CHEOPS: http://sci.esa.int/cheops/
*** ARIEL: http://sci.esa.int/ariel/

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