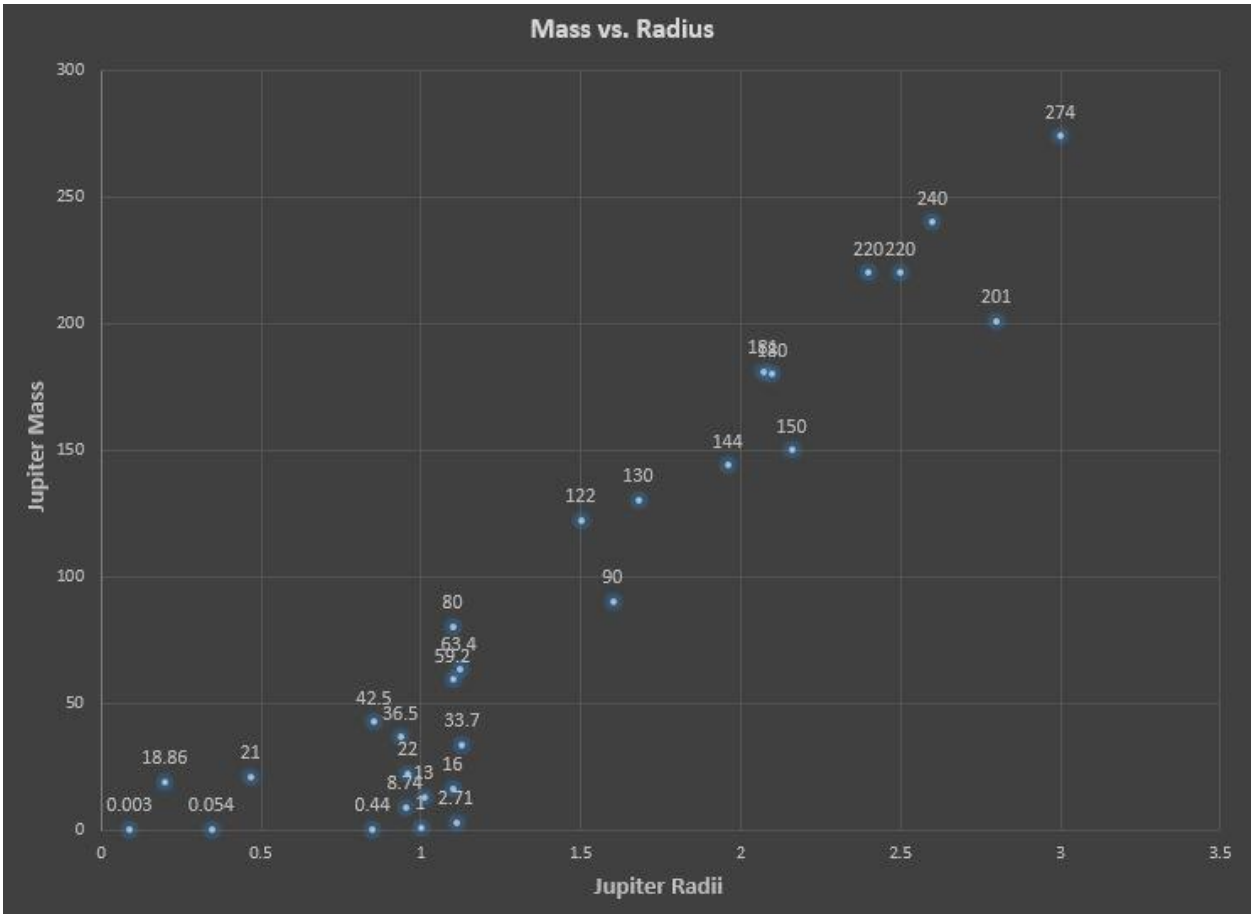
A Clear Trend in the Mass-Radius Relationship Concerning Stellar Evolution

Jeffrey J. Wolynski
Jeffrey.wolynski@yahoo.com
April 14, 2018
Rockledge, FL 32955

Abstract: Data was obtained from the Kepler Space Telescope and through various media to plot the trend in the mass-radius relationship of stars as they evolve. The trend is that as they lose mass and evolve, they shrink in diameter. This is predicted by stellar metamorphosis, as stellar evolution is planet formation itself.

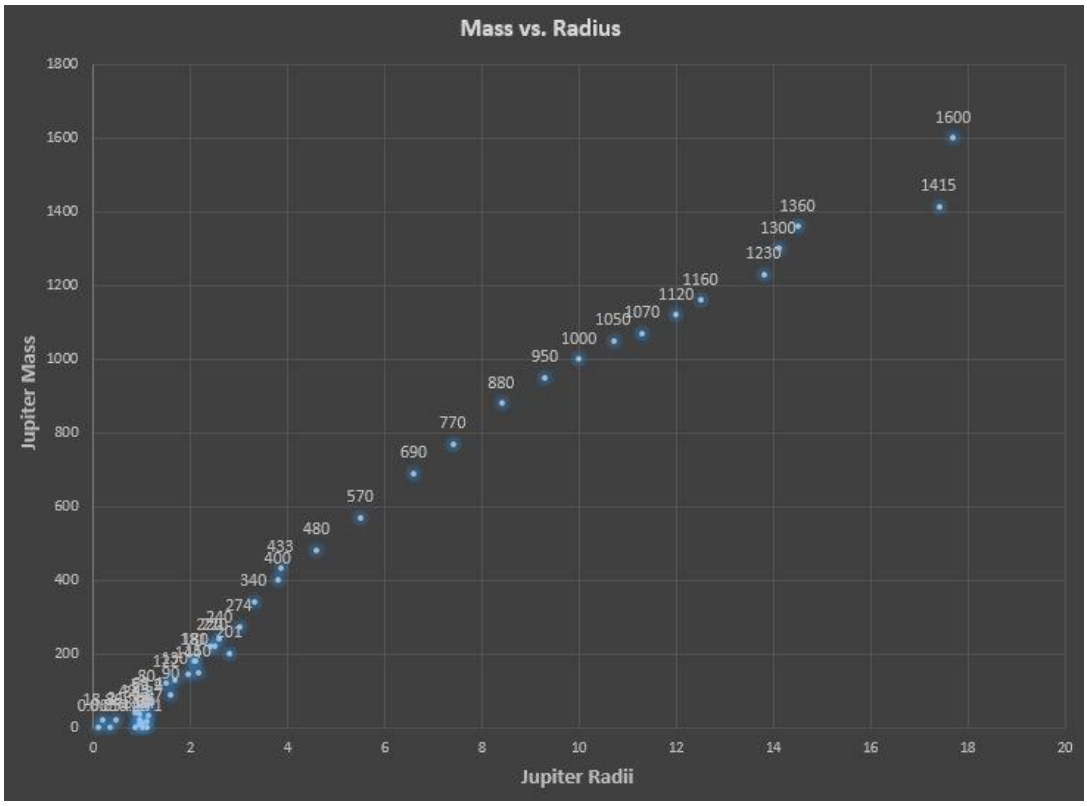
The nebular hypothesis and all accretion theories cannot explain anything. It is suggested to notice that stars cool, shrink and lose mass becoming what are called "planets/exoplanets". The trend is clear.



Star	Radius/Jupiters	Mass/Jupiters
Jupiter	1	1
Earth	0.09	0.003
Neptune	0.346	0.054
Kepler-419 b	1.11	2.71
Wasp 144 b	0.85	0.44
HAT P 2 b	0.951	8.74
CoRoT 33 b	1.1	59.2
CoRoT 15 b	1.12	63.4
GJ 570 D	0.855	42.5
EPIC 219388192 b	0.937	36.5
NLTT 41135	1.13	33.7
WISE 1217+16 A b	0.96	22
Kepler 57 b	0.2	18.86
HN Peg b	1.1	16
WISE 0458+6434 b	1.01	13
GJ 229 B	0.468	21
Kapteyn's Star	3	274
TRAPPIST 1	1.1	80
Wolf 359	1.6	90
Barnard's Star	1.96	144
Proxima Centauri	1.5	122
Kepler 42	2.4	220
Kepler 445	2.1	180
Kepler 1649	2.5	220
K2-28	2.8	201
Kepler 1646	2.6	240
GJ 1214	2.16	150
GJ 1132	2.07	181
YZ Cet	1.68	130

We can even stretch it out to make sure that it is even clearer, in fact, crystal clear, that stars can be traced all the way back to earlier stages of evolution.

Sun	10	1000
K06893	4.6	480
K06904	7.4	770
K06910	5.5	570
K06918	9.3	950
K06942	13.8	1230
K07034	6.6	690
K07009	8.4	880
K07003	10.7	1050
K07005	11.3	1070
K07040	12	1120
K07059	17.7	1600
K2-14	3.86	433
K07272	12.5	1160
Kepler 249	3.8	400
Kepler 560	3.3	340
HATS 27	17.4	1415
Kepler 1104	14.1	1300
HAT P 34	14.5	1360



The bunched up stars that the very bottom left are the most evolved. Astronomers call those planets and brown dwarfs. They are expanded in the first diagram above this one. Most data was collected on this page:

http://iopscience.iop.org/0004-637X/822/2/86/suppdata/apj523473t5_mrt.txt

and this one:

https://exoplanetarchive.ipac.caltech.edu/cgi-bin/TblSearch/nph-tblSearchInit?app=ExoTbls&config=exomultpars

and of course Wikipedia.

It is suggested to discard the nebular hypothesis and big bang.