The Locations of M, L, T and Y Brown Dwarfs on the Wolynski-Taylor Diagram

Jeffrey J. Wolynski July 30, 2018 Cocoa, FL 32922

Abstract: According to establishment brown dwarfs are strange and not connected to the regular path of stellar evolution or planet formation. Unfortunately this is false, and has been false since brown dwarfs have been discovered, and will continue to be false well into the future after the failed star false knowledge is scrubbed from the science textbooks. Brown dwarfs straddle the line between strongly radiant stars and stars that no longer shine brightly, the line between very massive stars and small ones, and the line between young and old stars. They are not failed stars at all as is accepted by the establishment, but intermediate aged ones. This means M, L, T and Y type brown dwarfs can be easily placed on the Wolynski-Taylor diagram with reference to the General Theory of Stellar Metamorphosis.

Brown dwarfs connect the qualities of young stars to the old ones. A short list of qualities that brown dwarfs bridge the gap of concerning stellar evolution (planet formation) is provided as well.

1. Brown dwarfs are neither very young, or very old, they are middle aged. So any claim of them being very young <100 million years old, or very old >500 million years old are false

2. They are in the middle mass ranges between young and old stars, meaning they are not extremely heavy nor are they really light.

3. They shine strongly in the infrared, thus their spectrums are less apparent than young stars, but much more radiant than old ones.

4. Their global magnetic fields are weaker than red dwarfs, but much stronger than stars that are even older and more evolved such as Jupiter/Saturn.

5. Their physical diameters are in between younger stars and the older ones.

6. etc.

This all being said, brown dwarfs cannot possibly be failed stars. There is nothing "failed" about them, they are just a stage in their own individual evolutionary sequences. Saying a brown dwarf is a "failed star" is like saying a teenager is a failed baby/toddler. It does not make any sense, it has grown far beyond the baby/toddler stages of development. As well, saying brown dwarfs will never become like Earth is like saying a teenager will never grow up to be an adult, which is also very strange. Overall, establishment astronomy is just strange and quirky. Their models and theories do not make any sense because they are mashed together from theories that were invented before all the data was available, nor are they consistent with the observational facts of nature, and all of astronomy as a whole. It can further be reasoned that brown dwarfs, and their specific stages of evolution crawl along at slower rates than earlier stages, but much faster than late stage stars. Looking at the diagram which is in a log scale, we can see the issue here.



The orange rectangle is where all stages of "brown dwarf" are located. The M, L, T and Y stages as classified by establishment are in that rectangle. Making a quick estimate of the ages, we can see that they start about the 230 million year mark of a star's metamorphosis, and stretch to about 450 million years old. This means that all brown dwarf stages occur within a time frame of about ~220 million years. This is also similar to teenage years as well, as 13-19 is only 6 years of a person's life, a very short time relatively speaking. The time between full ocean world to Earth stage is about ~5,000 million years, so about 22.7 times that amount. What this means is that we will not see as many brown dwarfs as Earth type worlds, simply because their stages of evolution happen quite rapidly. As well, we should be able to find more brown dwarfs than hot young stars like the Sun, simply because they evolve relatively slower than

younger stars. Unfortunately since they are dim, the only ones we will find will be in the local neighborhood, but for sure, they outnumber both red dwarfs and orange dwarfs in evolved galaxies like the Milky Way, as is predicted by stellar metamorphosis and this diagram.

Next, we have to reason very carefully. If brown dwarfs really are failed stars, then how exactly did they get to their masses and gain their enormous energies? It is simple reader. They are older stars that are still dissipating the heat from earlier stages and losing mass. This explains why they are less massive and less energetic than younger stars. Continuing on this path of losing mass and heat, only leads to one conclusion, they will become planets. Keeping brown dwarfs as separate entities again, is like isolating teenagers from babies/toddlers and adults. It does not make any logical sense.

The ~220 million years that it takes for a brown dwarf to evolve in, is quite a long time. This is not something to scoff at, but it does allow us to accurately place happenings in our own solar system in a more interesting light. I'm saying this so that there is no confusion, but take a look at Jupiter on the diagram. Is it apparent that it is only 550 million years old? Sure, just line up Jupiter with the x-axis below to find its age. How could Jupiter be that young, if the whole solar system is claimed to be 4.5 billion years old? Well, Jupiter has never had its age properly determined by establishment, nor has any astronomical model given any evidence of it being 4.5 billion years old. They just assumed it to be so based off meteorites that have no evidence of originating from Jupiter. Talk about assumptions! In fact, it is an independent object, a mini-solar system in itself, that was well evolved past brown dwarf stages before the Sun even adopted it, if not while it was in brown dwarf stages. Its extra mass was doubly advantageous in flinging objects away from it and adopting others. This may be why it has the majority of the angular momentum of the Solar system! Not only that, but this means it was much brighter in Earth's past, many tens of millions of years ago, when it was a younger, hotter, bigger brown dwarf!

What is even more interesting is that it probably had Neptune or Uranus orbiting it at one point so when the Sun/Jupiter system came into contact, Jupiter flung out some angular momentum (lost Neptune/Uranus to the outer system), but still kept a large portion of its angular momentum when the Sun adopted it. It was a wild, chaotic scene, and orbital rearrangements happen like this multiple times over hundreds of millions of years, all over the galaxy! Not only that but the Sun itself has yet to go from baby to toddler to teenager, which it will! This means that in about 140 million years the Sun will become a red dwarf, and then continue shrinking and losing mass, eventually become a brown dwarf after about 120 million years hanging out in the red dwarf stages. First an M, then L, then T, then Y brown dwarf and will resemble Jupiter (what is possibly a Y brown dwarf, but more on that later, the establishment still has yet to acknowledge the very basics of star evolution, so their definitions are slippery at best).

So to wrap all this up, people should just remember that brown dwarfs are not failed stars, they are stellar teenagers. Classifying them all differently does nothing to explain what they are. Sure, you have 7th, 8th, 9th, 10th, 11th and 12th grade, but to claim

somehow student teenagers just pop into existence as is, makes as much sense as saying a brown dwarf just pops into existence as is, in a M, L, T or Y configuration. Not only that, but they also mix together when they walk through the hallways at school, which means just because they are seen together or talking to one another (in stellar orbits), does not mean they are the same age either! Hopefully astronomers can learn these simple things. It does no good to ignore common sense.