Response to Matthew Miller on his Critique of Geocentrism By Robert Sungenis

http://blog.matthewmiller.net/2010/09/why-geocentrism-is-wrong.html

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Why Geocentrism is Wrong

There's a Geocentrists convention being held to try and claim the sun orbits the Earth.

This depresses me greatly. as it's an indication of yet ANOTHER way the American education system has failed catastrophically. One could ask "Well, how would an Earth centered solar system even look different?" Here's a few examples of how:

Starting Points

None of the probes we've sent into space would have reached another planet, as all the navigation calculations done assume a massive sun in the center of the solar system and planets that orbit it. The current calculations of satellite orbits would simply not work. Instead of the Moon as our main satellite, we'd also have the Sun and all the planets to contend with.

R. Sungenis: This is a common misconception among those who don't know the physics or are ignorant of how NASA or the JPL send up rockets and space probes. They can use either the ECIF (Earth Centered Inertial Frame) in which the Earth is used as a fixed object in space and around which the sun and planets revolve; or the SBF (Solar Barycentric Frame) in which the sun is used as the most central object but with the center of mass fluctuating near the sun. Why? Because both systems have the same geometry and gravity. There is no distinction whatsoever.

Miller: The orbits of the planets would look more like that of the moon and would be far easier to predict. The machinations needed to predict the positions of the planets with an Earth centered solar system are maddening.

R. Sungenis: No, it is actually the other way around. The ECIF is easier to use to predict the positions of the planets because it doesn't have to deal with the center of mass issues that are always present in the SBF. In fact, the ECIF is often used to check the accuracy of the SBF.

Miller: We'd see no parallax when observing stars during different seasons. While the parallax is small and requires sensitive instruments to detect, it is very, very consistent.

R. Sungenis: Not true. In the Tychonic model in which the stars are in alignment with the sun and which both revolve around the Earth, there exists the same parallax as one would get in the heliocentric system. As one physics course points out:

It is often said that Tycho's model implies the absence of parallax, and that Copernicus' requires parallax. However, it would not be a major conceptual change to have the stars orbit the sun (like the planets) for Tycho, which would give the same yearly shifts in their apparent positions as parallax gives. Thus if parallax were observed, a flexible Tychonean could adjust the theory to account for it, without undue complexity. What if parallax were not observed? For Copernicus, one only requires that the stars be far enough away for the parallax doesn't force the unmeasurable. Therefore the presence or absence of parallax doesn't force the choice of one type of model over the other. If different stars were to show different amounts of parallax, that would rule out the possibility of them all being on one sphere, but still not really decide between Tycho and Copernicus.

In fact, if we don't worry about the distant stars, these two models describe identical relative motions of all the objects in the solar system. So the role of observation is not as direct as you might have guessed. There is no bare observation that can distinguish whether Tycho (taken broadly) or Copernicus (taken broadly) is right. (University of Illinois, Physics 319, Spring 2004, Lecture 03, p. 8).

Miller: The Sun, the Moon and Solar Eclipses

The sun would have to be much, much smaller for the Earth to keep it in orbit, well below the lower threshold for it to contain enough gas to ignite into an active star. As a result it would need a very different fuel source than what we believe it has now.

R. Sungenis: No, not quite true. Miller's view is a presumption placed upon Newton's law of gravitation ($F = m_1m_2/r^2$). Newton did not say that the smaller must revolve around the larger. He said that both bodies revolve around the center of mass. Granted, if the sun, the earth and the planets were the only bodies in the system, the Earth would be required to revolve around the sun, no question. But modern science, decades after Newton, has found that it must the rest of the mass in the universe, *e.g.*, the 10^{22} stars that fill the universe. Their gravitational force determines how our sun-earth system will react. Modern science already admits the sun is affected by the stars because it believes the sun revolves around the central stars in the Milky Way galaxy. As it turns out, modern physics allows that the Earth could be the center of mass for the universe if the sun and the 10^{22} stars were precisely positioned to allow for it.

Miller: Solar eclipses would be a different beast. We have a near perfect fit now because of how the size and distance of the sun gives it the appearance of being the same size as the moon. The moon is already about 1/4 the Earth's diameter. Unless the sun were in the same orbit as the moon it would have to be either further away and larger, or closer and smaller. Being the same distance would mean there were no solar eclipses. The further away it gets the larger it has to be to maintain the illusion of identical sizing so vital to a solar eclipse.

Either way, the sun would have to stay pretty close to lunar size to not escape Earth orbit. This would put it close enough to the moon to keep it pretty much molten, at least during close passes. The moon would not be the unchanging venue we see today but a, active, volcanic place constantly heated by close proximity to the sun.

R. Sungenis: Not so at all. Modern science has agreed that the geometry and dimensions are identical in the heliocentric and geocentric systems. In other words, the eclipses would be the same.

Miller: The sun would cause tides as well. In a sun centered solar system, the Sun is so far away that it's gravitational pull doesn't cause localized tides the way the moon does. A sun small enough to stay in Earth orbit and yet appear the same form Earth's surface would cause tides. This would mean tidal forces would not be determined by the moon's orbit alone, but by a combination of lunar and solar orbits. Daytime would ALWAYS be high tide and days when you could see the moon and the sun would have particularly high tides. Tidal pool ecosystems would either not exist or be adapted to a highly irregular high / low tide pattern.

R. Sungenis: Not so, since geometry and dimensions would be the same.

Miller: We'd See Differently, if we Were Here at all

None of that really matters as we'd probably be bathed in lethal radiation. A sun small enough to be kept in Earth orbit yet bright enough to produce as much light as the one we see would probably need a nuclear power source involving metal, not a plasma miasma. This means the Earth would probably be a sterile wasteland devoid of life, as it would be bathed in enough nuclear radiation to rip apart most life forms.

The visible spectrum of light would be different. A plutonium reactor for example emits a pale blue light, not the white light we see from our sun. The sun has the wrong color spectrum for self sustaining nuclear reactions in a body small enough to be kept in Earth orbit.

R. Sungenis: Again, the sun needn't be smaller. It is the same size as in the heliocentric system and the same distance away from Earth.

Miller: The Outer Solar System. Jupiter would not exist as we've seen it. The supermassive gas giants we've seen with our telescopes and probes would have too much gravity to be kept in orbit by tiny little Earth. They'd have to be much, much smaller, which means our calculations on how to get probes to them would have been so massively incorrect as to prevent the probes from getting there.

R. Sungenis: No, the sizes of the planets would be the same as in the heliocentric system.

Miller: This is just the tip of the iceberg. One could easily spend months or years compiling a list of ways an Earth centered solar system would be different from the one we have now. It takes quite a bit of ignorance to try and assert that the Earth is the center of the solar system.

R. Sungenis: No, the iceberg does not exist. Mr. Miller is working under a fundamental flaw – a misapplication of Newton's law of gravitation

Miller: Update: Venus: If the Earth was the center of the solar system the current calculations for predicting a Transit of Venus simply wouldn't work, if transits still happened at all. Remember we're dealing with a sun slightly larger than the moon, orbiting a distance not that far beyond it. Venus would either be a large planet far beyond the sun's orbit, or a much smaller satellite inside that orbit. If Venus were further away then a Transit of Venus would NEVER HAPPEN. If it were inside the orbit of the sun then Transits would happen with far greater frequency than they do now. If the orbit of Venus were irregular enough to account for the rarity of a Transit of Venus then we would be seeing it as frequently as we see a comet, not regularly enough for ancient cultures to have dubbed it the "Morning Star."

Indeed, explaining a Transit of Venus AND the frequency with which we see Venus now would require one to conclude that there are actually multiple objects in the solar system that just HAPPEN to have appearances and orbits aligned in JUST the right way as to make them LOOK like they're all the same planet.

R. Sungenis: Again, the same flaw in Mr. Milles application of Newton's law is apparent, a flaw that causes him to believe that the geometry and dimensions would have to be different.

Miller: Update: Planetary Orbits: The web site jgiesen.de has a model showing side by side comparisons the Heliocentric and geocentric motion of the bright planets. It illustrates how absurdly convoluted the orbits of the planets would be in a geocentric model, if they were to fit the positions of the planets as observed from Earth. As you can see from the animation the geocentric model necessitates the planets not only revolve around the Earth, but move in an additional circle as well. Geocentrism requires additional orbits around unseen objects. Venus, for example, simply can't orbit the Earth directly, but would have to be orbiting something invisible and transparent which was in turn orbiting the Earth. A sun centered solar system actually FITS the observed data using the known laws of physics. Geocentrism on the other hand requires an invisible gravity well for each planet that we can neither see nor detect.

R. Sungenis: Not so. The Tychonic model of geocentrism has the planets revolving around the sun, not a mysterious gravity source. The sun, in turn, revolves around the Earth.