

A new solar system model, the Tychos

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The Keplerian/heliocentric worldview is often presented as the beginning of modern scientific inquiry, and a triumph over primitive, unscientific cosmologies. However, 440+ years of astronomical observations can support in many ways an alternate construction of our solar system called the Tychos [1] model. With its accompanying software simulator [2], it makes nearly-accurate predictions (is falsifiable), and matches well with historical observations. “Anomalies” of the Keplerian/heliocentric model include: 1: whether the Sun has a binary companion, 2: why only Mercury and Venus have no moons, 3: why Venus always presents the same face to Earth at its closest approach, 4: the “anomalous” precession of Mercury’s perihelion, and other aspects of Mercury and Venus, 5: the cause of the General Precession (Newton’s lunisolar wobble theory is not it, it does not match with observables), 6: why Mars and Sun exhibit 79-year cycles locked at a 2:1 ratio (and many other “harmonies” found between bodies), 7: why there is a sidereal diurnal variation of G, in interferometry results, and in the movements of stars, 8: why sunspot formation location shows a geocentric preference, and more.

Simon Shack collected astronomical observations and compared them to a semi-Tychonic, geo-heliocentric (AKA geoaxial binary) solar system model. His software engineer partner Patrik Holmqvist built a software simulator to test the history of astronomical observations. Shack found to his satisfaction that all astronomical observations were consistent with the Tychosium software simulator. The crucial component which distinguishes his “geoaxial binary” model from its predecessor, Tycho Brahe and Longomontanus’ geo-heliocentric model, is a 25,344 year slow orbit accomplished by Earth as it is near the “center” of the system. The author finds the model consistent and adaptable to most astronomical observations. A small claim that could be assigned to this model is that it provides a second way of mathematically modeling a complex system of orbital motions. There are so many pure integer “resonances” and uniform circular motion in this model: it seems to suggest an importance to Earth beyond being a random “3rd rock from the Sun” as it is in heliocentrism and materialism. It could be argued that gravity has been misunderstood.

There are philosophical implications for cosmology if this model in some fashion describes reality. The heliocentric model and Newton’s Principia which is based on it are the foundations of all of modern science and what might be called materialism.

References

1. Shack, Simon, "The TYCHOS: Our Geoaxial Binary System", 2023.
2. Tychosium software simulator, URL: tychosium.tychos.space , 2025.