

## Appendix 30 The Tychos – Our Geoaxial Binary System

16 October 2019, 5:09 pm<sup>1</sup>

Vittorio Goretti - astronomer extraordinaire



I recently promised to translate the best papers by Vittorio Goretti (1939-2016), the Italian astronomer who for several years strongly questioned ESA's stellar parallax data and its blatantly cherry-picked nature and shocking inconsistencies. In the meantime, I've realized that Goretti actually did have some good English translations of his work posted on his website. I think that, for now, Goretti's paper on red stars in the Hipparcos Catalogue<sup>2</sup> will suffice to give the reader an idea of Goretti's quite astonishing findings. I highly recommend reading the entire paper, but for those with limited time on their hands, I have summarized its contents below.

Lest anyone question Goretti's competence and credibility, please know that he was a distinguished and highly experienced veteran astronomer who, in his later years, specialized in the trigonometric parallax method. The above study was conducted at the richly equipped Loiano observatory run by the prestigious Bologna University. From 1997 to 1999, he discovered over 30 minor planets and produced about 20,000 measures of positions of known minor planets (among which a great number of near-earth asteroids), thereby improving their orbital parameters and becoming the most prolific independent Italian observer during that period. He also discovered over 32 new asteroids, one of which now bears his name.

### Summary of Vittorio Goretti's findings

Goretti conducted rigorous comparisons between the stellar parallaxes listed in the two ESA catalogues: the larger Tycho Catalogue, containing over 2 million stars, and the Hipparcos Catalogue (the most accurate one, according to ESA), containing only about 118,000 stars.

- Firstly, to verify the accuracy of his own observations, he measured the parallaxes of a number of well-known stars (including Barnard's star) and found them to be reasonably in accordance with the ESA catalogues. He was thus satisfied that there was no fundamental/systematic error in his own observations.
- Secondly, he started comparing a large number of lesser-known, or shall we say, "anonymous" stars. In astronomy circles, these "nameless stars" are identified by a string of letters and numbers (e.g., "GSC3064855" and "HIP78741"). In this subsample, discrepancies ranged between one and two orders of magnitude. That is to say, Goretti's measurements would put those stars between 10 and 100 times closer to our Solar System than suggested by ESA's measurements.
- Thirdly, and even more importantly, he found that the proportion of the stars listed in the Hipparcos catalogue were in stark contrast with what astronomers consider an established fact, namely that the vast majority of the stars in our skies are "red dwarfs", whereas a small minority are very distant "red giants" or "supergiants". In ESA's Hipparcos Catalogue, this proportion (~50,000:1) is practically—and quite inexplicably—inverted.
- Fourthly, Goretti's patient and rigorous scrutiny of ESA's far larger Tycho Catalogue concluded that "about half the average values of the parallax angles in the Tycho Catalogue turn out to be negative." Note that when Goretti says that half the values are negative, he is actually referring to "half the stars that exhibit any parallax at all" (in both catalogues, the other 50% display zero parallax). Of course, negative parallaxes cannot exist under the heliocentric Copernican model, as I have expounded at length elsewhere.<sup>3</sup> On the other hand, under the Tychos model, negative and zero parallax measurements are to be fully expected. In fact, the distribution of the stellar parallaxes to be found in ESA's catalogues (i.e., 25% positive, 25% negative, and 50% zero) is exactly what one would expect in the Tychos model.

In the last years of his life, Goretti made other discoveries which might be of paramount interest to the Tychos model. Below is a short description of a discovery extracted from his now dormant website:

*"Then, in 2013, he gave up his observation work for family reasons. His last work was in collaboration with Mauro Amoretti and Silvano Casulli, two colleagues of his respectively in Sanremo and Guidonia. They were carrying out research into eclipsing binary stars (Algol-type). The light curves and the measurements of the distances of some eclipsing binary systems (two stars at a great distance according to the Hipparcos Catalogue, but a white dwarf and a planet according to Goretti's team), show for those systems a different reality.*

*One example among many open questions: AL Gem (GSC 1356 206) is two stars with a parallax angle of  $(12 \pm 24)$  mas and a distance unknown but certainly high (as Hipparcos says) or is it a white dwarf and a planet with a parallax angle of  $(380 \pm 40)$  milliarcseconds and a distance of  $(8.6 \pm 0.9)$  light years (as found by Goretti)?"<sup>4</sup>*

<sup>1</sup> <https://cluesforum.info/viewtopic.php?p=2412882#p2412882>


<sup>2</sup> [http://septclues.com/TYCHOS/Goretti\\_2nd\\_research.pdf](http://septclues.com/TYCHOS/Goretti_2nd_research.pdf) (source: <http://www.vittoriogoretti-observatory610.org/wp-content/uploads/2014/01/2nd-research-ok1.pdf>)

<sup>3</sup> See Appendix 28.

<sup>4</sup> <http://www.vittoriogoretti-observatory610.org/curriculum-vitae/>

In other words, towards the end of his life, as Gorette was committing himself to the study of binary stars, he concluded, among other things, that the “B” component of binary systems (the small companion) seemed more like a planet than a star.

Of course, in the Tycho model, the binary companion of our closest star (the Sun) is a reddish/orange body known as “Mars”. Is Mars a planet, as we have always been told, or is it perhaps an old and cooled-off “red dwarf”? To be sure, Mars is the only reddish/orange body in our entire Solar System.



Artist's conception of a red dwarf, the most common type of star in the Sun's stellar neighborhood, and in the universe. Although termed a red dwarf, the surface temperature of this star would give it an orange hue when viewed from close proximity.

Amateur astrophotography of MARS (Rob Pettengill)

**DOES MARS LOOK ANYTHING LIKE A RED DWARF?**

RED DWARF (Wikipedia)