

4.1 *The Telescope Speaks for Tycho – Simon Marius,
Giovanni Battista Riccioli, and the problem of telescopic
observations of stars in the early 17th century*

CHRISTOPHER M. GRANNEY

Jefferson Community & Technical College
Louisville, Kentucky (USA)

`christopher.graney@kctcs.edu`

In his 1614 *Mundus Iovialis*, Simon Marius reported that telescopic observations revealed all the more prominent stars to appear as definite disks. This, said Marius, indicated the hypothesis of Tycho Brahe (in which the planets circled the sun while the sun circled the Earth) to be the correct one. Marius seems to be the first to cite telescopic observations of stars against the Copernican system. I will discuss what Marius saw, and why his telescopic observations of stars were indeed a problem for Copernicans. I will use as illustration the work of Giovanni Battista Riccioli, who took pains to not only use telescopic star observations argue against the Copernican hypothesis, but who also provided a detailed description of how to make such observations, so that any observer could see for himself the problems with that hypothesis.