

The science of cosmography is probably the earliest of all the natural sciences, and cosmological speculation appears to accompany it from the outset. Long before the dawn of history the Chaldeans possessed much accurate information about the stars, and the zodiac was known to the Egyptians not less than fifteen centuries before our era. Always pursued with great interest, such studies received their first provisional systematic formulation at the hands of Hipparchus in the second century B.C. He, the greatest of the astronomers of antiquity, succeeded in bringing the apparent movements of the sun, moon, and planets into an arbitrary scheme which was nearly perfect for the sun, though less so for the other movable celestial bodies. He also measured and catalogued the positions of a large number of fixed stars. Upon this secure foundation of quantitative observations modern astronomy has built. At the beginning of the modern period Copernicus, Tycho Brahe, Kepler, Galileo, and Newton reduced the phenomena of the solar system to law. At a later day speculations based upon their results and upon growing knowledge of physics and chemistry led Thomas Wright, Kant, and finally Laplace to a rational, if somewhat imperfect, cosmological