

Our Solar System: In Depth. . . part 3

History



Humans have gazed at the heavens and tried to understand the cosmos for thousands of years. Ancient civilizations placed great emphasis on careful astronomical observations. Early Greek astronomers

were among the first to leave a written record of their attempts to explain the cosmos. For them, the universe was Earth, the Sun, the Moon, the stars, and five glowing points of light that moved among the stars. The Greeks named the five points of light - called planetes, or wanderers - after their gods. The Romans later translated the names into Latin - Mercury, Venus, Mars, Jupiter, and Saturn - and these are the names astronomers use today. Planetary features are named by the International Astronomical Union, founded in 1919. For more information about the names of planets, moons, and features, consult the Gazetteer of Planetary Nomenclature website at planetarynames.wr.usgs.gov.

Ancient observers believed that the Sun and all the other celestial bodies revolved around Earth. Astronomers gradually realized that the Earth-centered model did not account for the motions of the planets. In the early 17th century, Galileo Galilei's discoveries using the recently invented telescope strongly supported the concept of a solar system in which all the planets, including Earth, revolve around a central star - the Sun. Planetary moons, the rings of Saturn, and more planets were eventually discovered: Uranus (in 1781) and Neptune (1846). The largest known object in the asteroid belt, Ceres, was discovered between Mars and Jupiter in 1801. Originally classified as a planet and then an asteroid, Ceres is now designated a dwarf planet, along with Pluto, which was discovered in 1930; Eris, found in 2003; Haumea, found in 2004; and , found in 2005. There may be hundreds of dwarf planets in Pluto's realm.