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CASE STUDY OF MANNED MISSION TO PLUTO

Abstract

Pluto was the "ninth planet" to be discovered in our solar system and quite a few controversies surround this dwarf planet. First discovered 86 years ago, the celestial body was christened Pluto and was coined as the ninth planet of solar system. Since then various other celestial bodies of similar masses and sizes were discovered and were collectively named the Kuiper Belt. Since the discovery of Eris the International Astronomical Union (IAU) formally defined the term planet thus moving Pluto to the dwarf planet category. Since its discovery scientists and astronomers alike have been curious towards the nature of this celestial body. The recent launch of the New Horizons spacecraft by NASA in 2006 took about nine years to fly by Pluto. During its brief flyby of Pluto it made detailed measurements of Pluto and its moons. Man first set foot on the moon in the year 1969 and now preparations are under way for a manned mission to Mars. A manned mission to Pluto would signify the freeing of humanity from its shackles, tethering us to our Solar System. This paper will focus on the possibility of a manned mission to Pluto, the method of achieving this and the resources required. A detailed case study is prepared on the topic describing past and present proposed methods, their drawbacks, resources and technology required. The paper will also look into the future of this endeavour with the advancement in technology. A glance will also be thrown towards the moons of Pluto and the other bodies present in Kuiper belt describing their orbits, geology, atmosphere and surface compositions. The possibility of this mission will open new horizons extending our grasp on the understanding and workings of our universe and in local sense our solar system.