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Topic: Titania/Triton

Space travel is very expensive and time-consuming. This is why I propose that a mission to Uranus (Titania) should also encompass Neptune (Triton) to save fuel, money, and time. For my proposed project, a mission would be launched in the early 2030s, a timeframe which would be perfect because of the valuable alignment of Jupiter in relation to the trajectory of the rocket. The spacecraft would pass by Titania, taking samples and leaving a probe or rover on the surface of Titania, and would continue onto Triton in the interests of a similar process, after which the collected samples would safely return to Earth.

You might be asking yourself, why did I choose Titania as a primary target for this mission? After taking the coordinate information from NASA about the movement of Triton and the three proposed moons (Titania, Ariel, Oberon), I calculated the shortest distance between Triton and the moons in the expected timeframe, with Titania being the conceivable option.

Titania is an exemplary research target. The pictures taken by Voyager of Titania in 1986 intrigued NASA's brightest minds. Titania is riddled with craters and volcanoes, with signs showing their origins being related to oceanic activity under the surface, a sign of life, which would be a breakthrough in astro-biology. Titania is also valuable to celestial mechanics. Titania is the most massive Uranus moon, and the observation of its mass and gravity could alter and improve the theory of motion of the Solar System bodies. Finally, Titania and Uranus' magnetic field abnormalities could change our understanding of magnetism. Overall, Titania is an important part of the expansion of our knowledge of celestial bodies, and a combined mission to Titania and Triton could not only save NASA money and time, but it could also prove crucial to the future of space exploration.