

I believe that Target 3, Saturn's moon Titan, would be of the most scientific value. This is because Titan, although a moon, actually appears more like a planet. It is very similar to Earth, and scientists have commented on how this moon resembles what Earth may have looked like in its early stages. This is mightily important because any information about Titan could lead to a greater understanding of our own existence.

Titan is similar to Earth in many ways; it has large stable bodies of surface liquid, its climate creates surface features, such as sand dunes and shore lines, Titan also has seasonal weather patterns and a robust Nitrogen atmosphere which are all incredibly similar to Earth. All of these similarities with our planet make this moon incredibly important, and surely indispensable in furthering the understanding of ourselves.

Titan's atmosphere consists of mostly of nitrogen and its climate includes methane and ethane clouds, it has also been discovered that there are liquid hydrocarbon lakes on Titan. This coupled with its prominent similarity to Earth means that Titan has been heralded as a possible host for microbial life. Scientists believe that Titan will at least be a place which is rich in complex organic molecules. Titan is therefore of extreme interest, not just to scientists, but to everyone, as the understanding of Titan may lead to further understanding of the world around us. Not only this, but to discover life outside of our own planet, even in the form of microbes, would be an astounding discovery, and would lead to many other discoveries.

Although, this picture which Cassini takes of Titan will not prove the existence of life outside Earth, it could indeed lead to it. Massive discoveries are not made by one experiment or by one person, but rather by increments. This picture will be of much scientific value, because it will add to a widening bank of knowledge about Titan, which is essential for any ground-breaking discoveries to be made.

Although Titan has a very dense atmosphere, making it difficult to see anything on the surface, and although more may be found out if a probe were sent to the surface of Titan, this picture is still important. Improvements in technology means that much more can be seen than before in these pictures of Titan, and these pictures are essential if probes *are* to be sent to the surface. Another point of interest is that there has been evidence of cryovolcanoes on Titan, and this picture may shed more light on previous evidence.

Overall I believe that this Target is of more scientific value than the other two because, although it is unlikely that this target will show something entirely new, it is of more value in the long run. Looking into Titan could be a way of looking into the Earth's past, and may better our understanding of ourselves; and until we truly understand ourselves we cannot really understand the universe surrounding us.

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