

Titan, the biggest moon of Saturn, presents a unique opportunity to view an astronomical object similar to Earth, and to study its features. As well as being of scientific interest in its own right, Titan shares many of its characteristics with Earth, and may present an insight into the early stages of the Earth's life. Titan is the only other body in the solar system to be shown to have large bodies of stable liquid on its surface, apart from the Earth, and its surface is also geologically young, meaning that it presents a possible picture of what the Earth may have been like in earlier stages of its formation. Due to the fact that its volcanoes and lakes are composed of different materials to those on Earth, although still based on the elements hydrogen and carbon, it may show us a possible way of how life did occur, and how it could occur based on a different element. It is also possible that simple, if not similar life forms to those found in harsher conditions on Earth, may exist on the moon of Titan. This would widen our view of extra terrestrial life, and may help us also to understand our own development.

As well as being a possible way to study the development and occurrence of life, Titan can also show us Earth many millions of years ago and how it would have looked. This will help to discover why we are like we are now, and what is likely to happen geologically to our planet in the future. The moon of Titan may also help to explain weather and climate conditions, and help us to understand and predict our own. A photograph of Titan's surface would not only help to comprehend our future and past, but would also help us to understand the development and change of long term systems found on Earth such as plate movement and ocean/river formation. This may lead to more accurate prediction and understanding of such things and may even lead to better warnings of tectonic movement and natural occurrences.

A photograph of Titan's surface may help us to understand the patterns of weather and geological movement of the moon, aiding our understanding of the moon. Titan has a few features which are of interest. One of these is Xanadu, which is shown to be crossed with areas of differing relief. These could be due to tectonic activity which could aid in the understanding of Earth's tectonic activity, or could be river channels, which may be a sign of possible life, or a sign that the moon is older than expected. If so, the moon could be seen as a possible future for certain parts of Earth.

However Titan and its features are interpreted, they have a lot of potential for understanding and development, not only for Titan and its possibility of housing life, but for Earth's past and future, and their understanding, making Titan the best target for Cassini to photograph.

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