

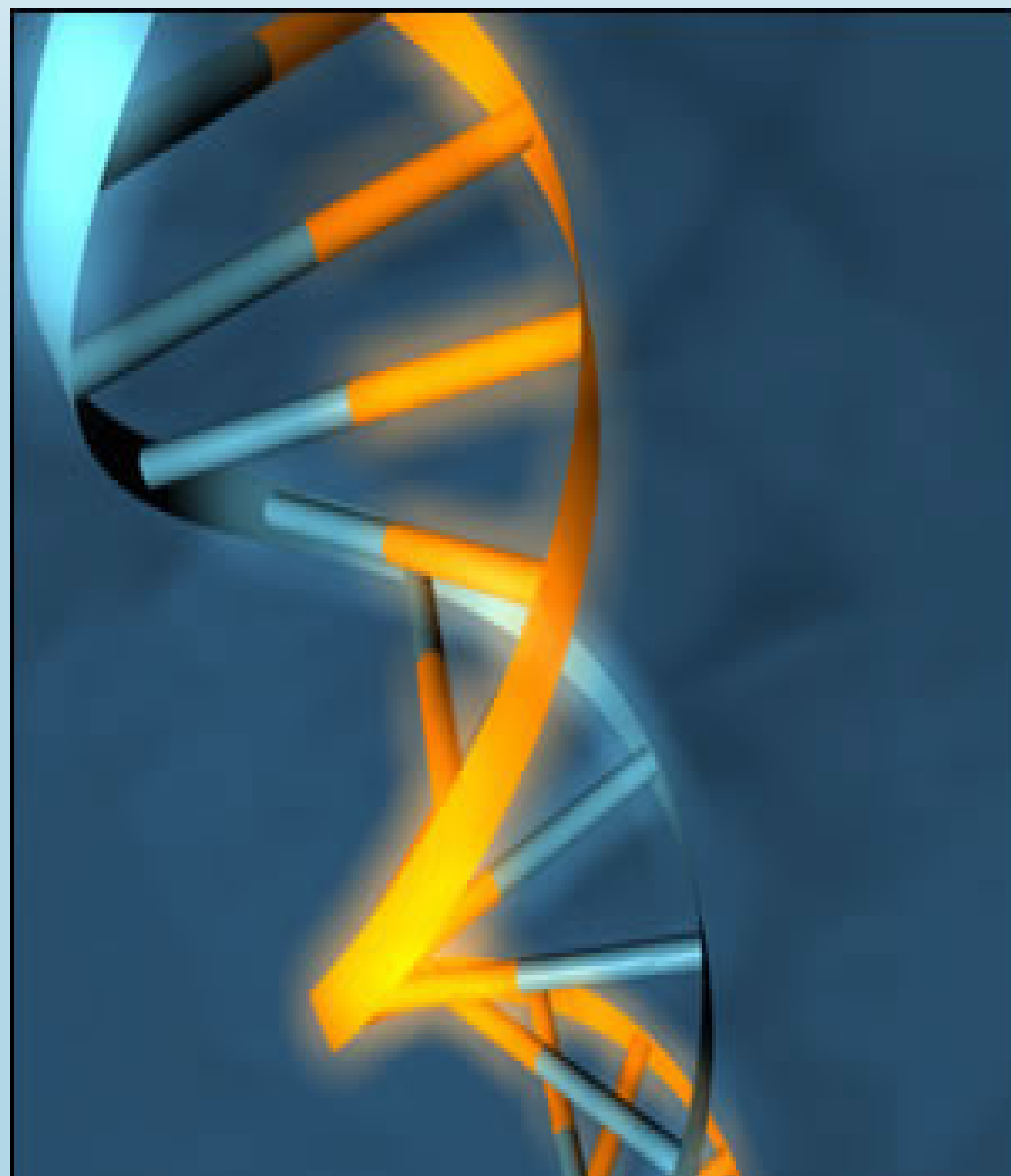
Creating Life

We now know how complex molecules are formed in space but how do these chemicals become life? How life came to be still remains a mystery but there are some things we do know...

How life came to Earth

It is believed that the 'building blocks' for life such as water and other chemical ingredients were brought to earth on comets.

Under the right conditions, the 'building blocks' for life form a soup of simple molecules. (This can be demonstrated by the Miller-Urey experiment which was carried out in the 1950s).

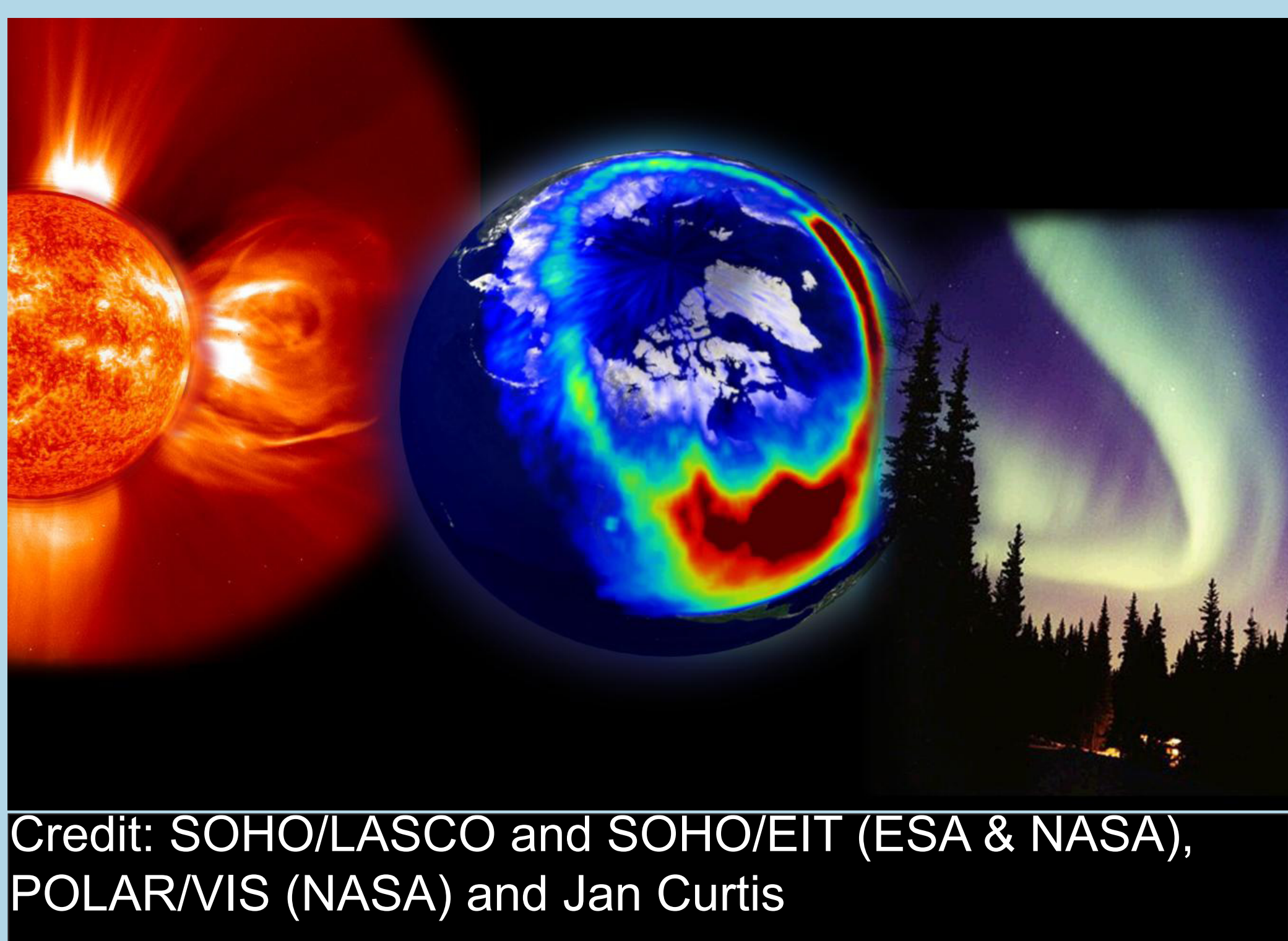


DNA: The molecule of life

Credit: www.all-about-forensic-science.com

Life on other worlds

Across the galaxy, over 120 planets have been found orbiting other stars. Maybe one of those is in the right place, with the right chemistry. If so, it is highly likely that life exists elsewhere.



Credit: SOHO/LASCO and SOHO/EIT (ESA & NASA), POLAR/VIS (NASA) and Jan Curtis

The Goldilocks zone

Did you know that you live in the goldilocks zone? For a planet to have life, it needs liquid water. This means that it needs to be in the right place at the right time.

The right place is the correct distance from the star a planet orbits. (Just as the Earth revolves around the sun, other planets revolve around other stars across the universe).

If a planet is too far away from its star, it is too cold and the water is frozen solid. If a planet is too close to its star, it is too hot and there is no water at all. But the goldilocks zone is just right.

Life in extreme environments

Life can exist in all kinds of extreme environments. Even on Earth, in extreme places such as the bottom of the ocean where there is no sunlight, life exists. Organisms that live in these environments are known as Extremophiles.