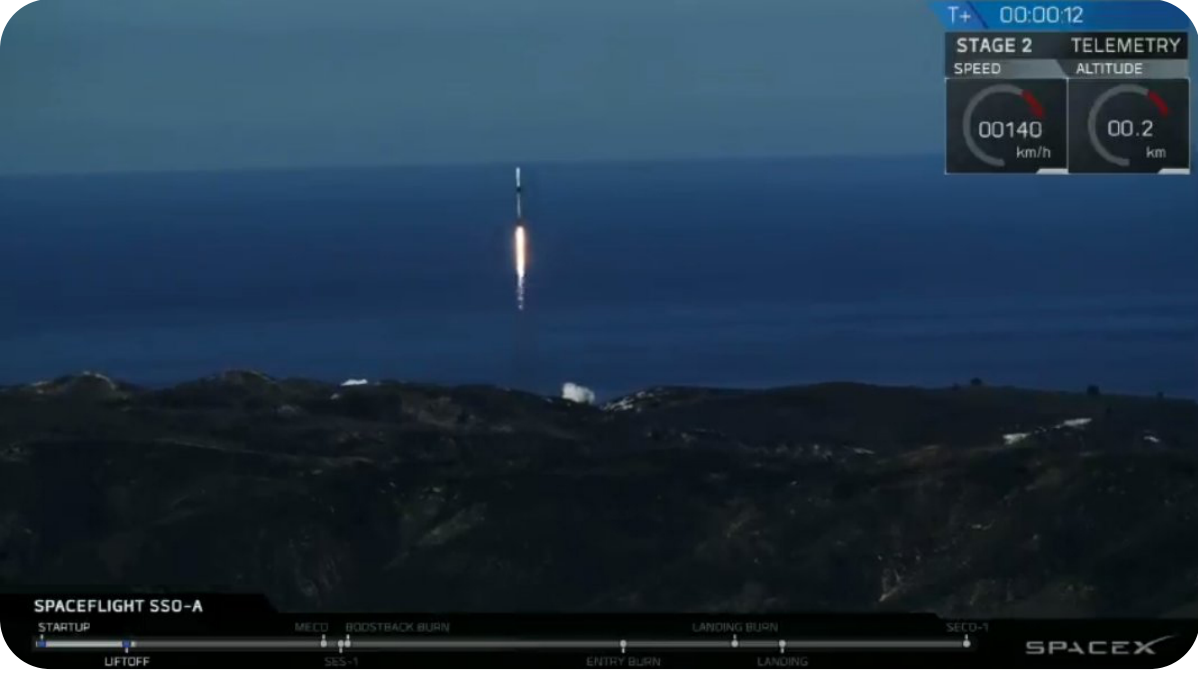


Student satellite blasts into space!



ESEO lift-off
[Access the image](#)

17 December 2018

Have you ever thought how amazing it would be if you could design and launch your own satellite? It is a dream that has come true for a group of over 600 university students from 10 European universities. They all worked together to make ESA's European Student Earth Orbiter, or ESEO for short. ESEO was loaded onto a SpaceX Falcon 9 rocket and successfully blasted into orbit!

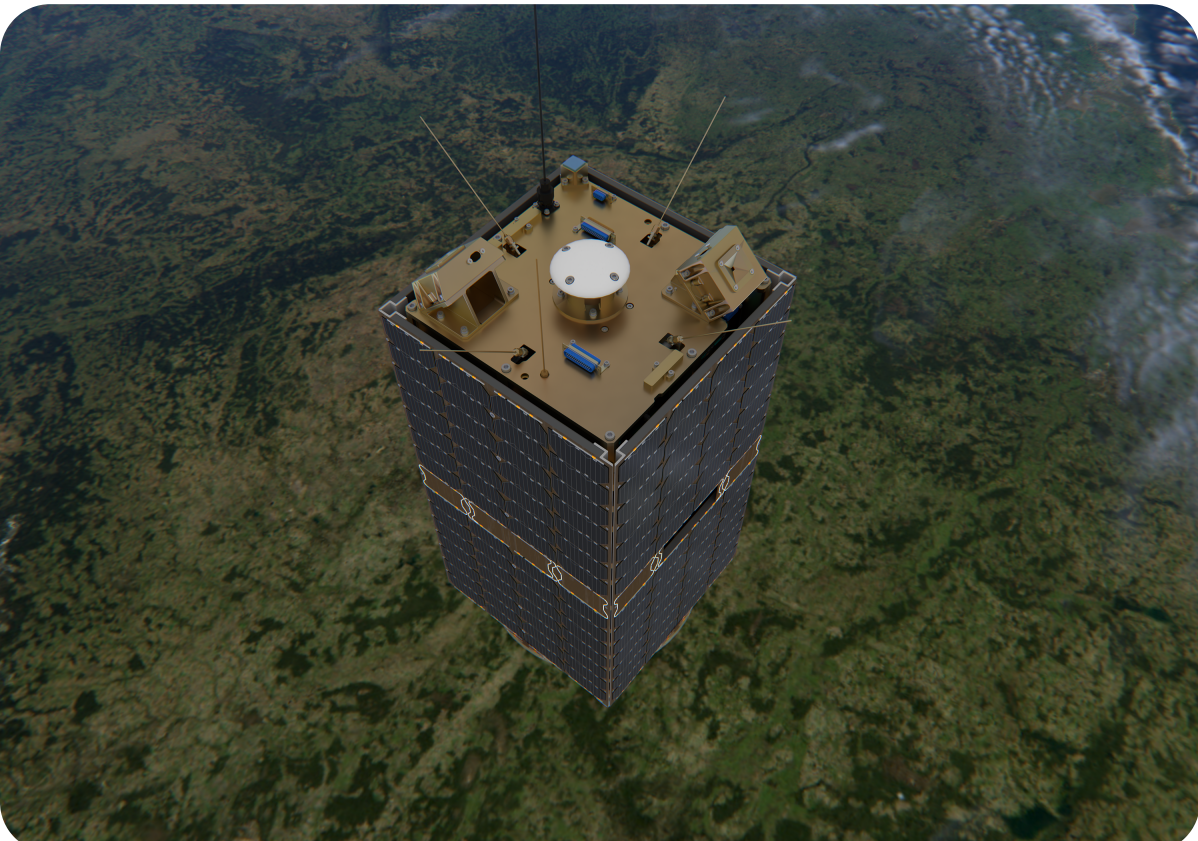
ESEO is part of an ESA programme to give incredible opportunities to university students from across Europe. The best way to learn is by doing, so students have been involved in every stage of the mission, from designing the satellite, to building it, and operating its experiments. ESEO is a satellite by students, for students!



Students attending ESEO launch live streaming
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Now that ESEO is in space, electricity will start to power up its components. The satellite needs to point in the right direction, so tiny thrusters will help to adjust its position. It will then be able to communicate with ground stations in Italy, Spain, and Germany.

ESEO will be sending data to Earth from its various experiments, all designed by – you guessed it, university students! ESEO features devices to very accurately give its position in space, as well as new software to show precisely which direction it is facing. ESEO will provide a new communication system for amateur radio users worldwide, and measure cosmic and solar radiation from above Earth's atmosphere. ESEO even has tiny cameras to take photos of our planet! The information it generates will be sent to schools and universities to help with science and engineering lessons.

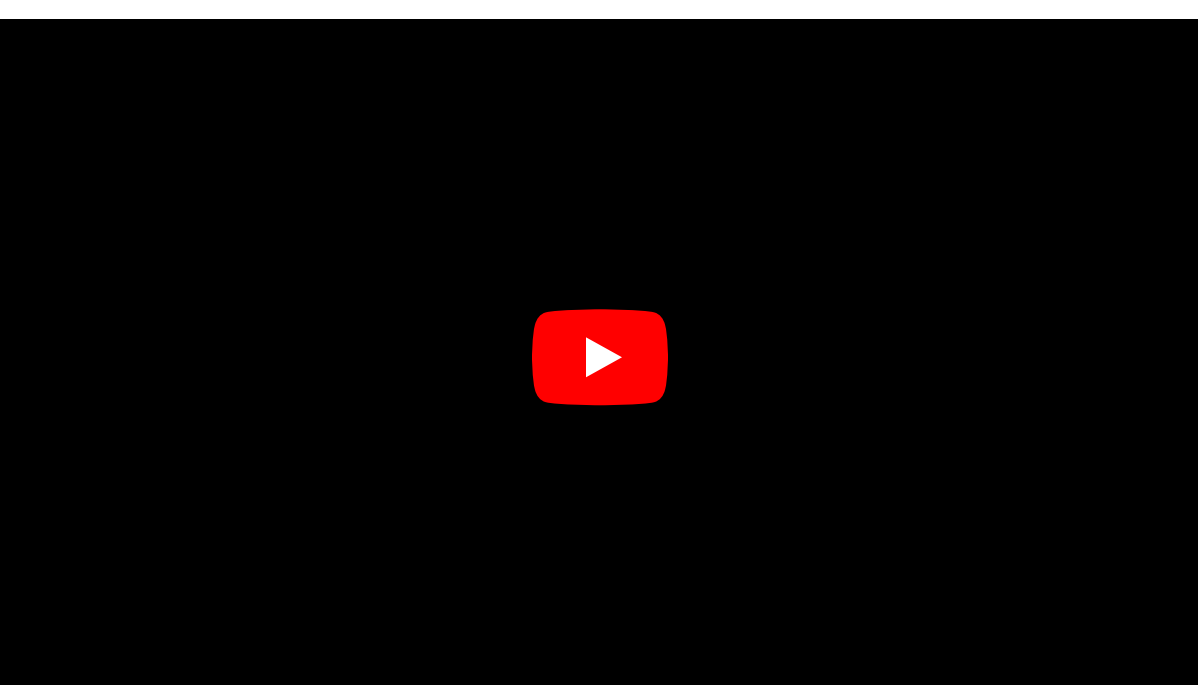


Top view of ESEO satellite
[Access the image](#)

ESEO's mission should last six months, but this may be extended to a year. Once that time is up, the satellite has one more trick! It will deploy a small sail, designed to speed up re-entry into Earth's atmosphere, where the satellite will burn up and be completely destroyed. This is much better than leaving it in orbit, like space litter!

The students involved have learnt a lot so far, and will gain even more experience by operating ESEO over its mission lifetime. Perhaps the students will go on to become professional space scientists, designing and launching even more satellites in the future!

Cool fact: ESEO measures 66x33x33cm, making it only slightly larger than a microwave oven.



Spacecraft

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