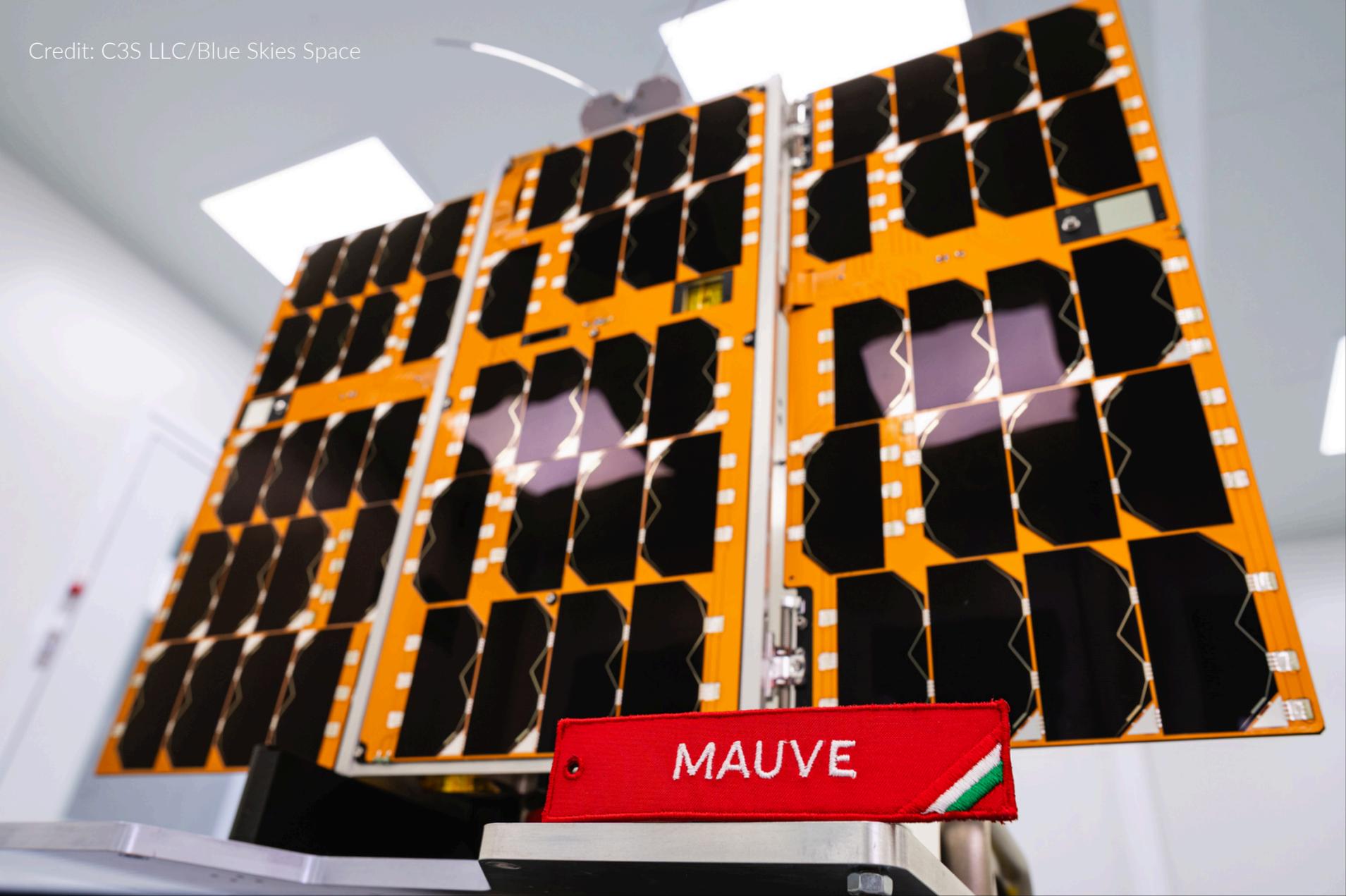




MAUVE

Media Kit

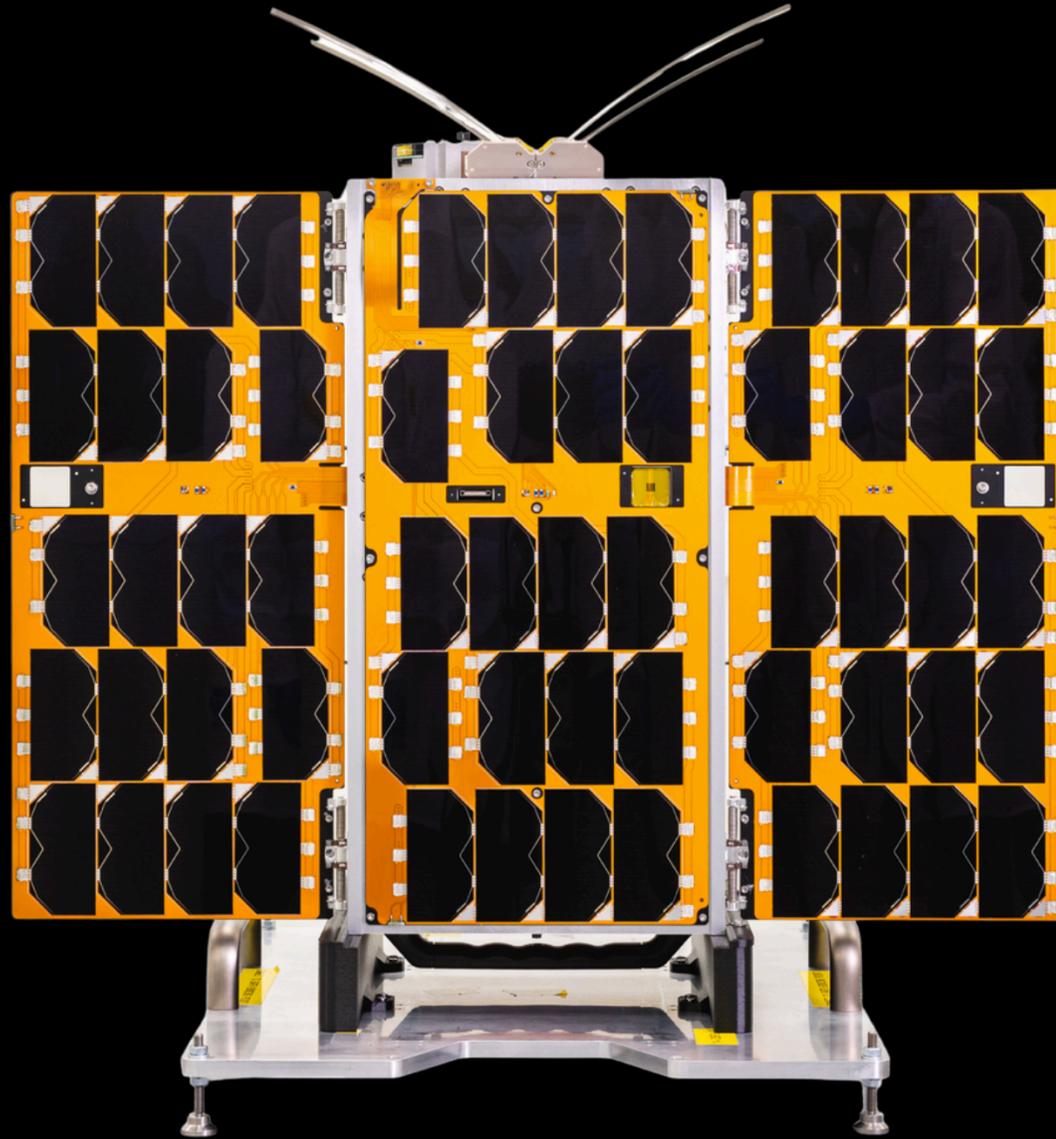




- Overview 3
- Science Priorities 4
- Satellite 6
- Launch 8
- First Light 9
- Science Programme 10
- Media Resources 12

Contents

Overview

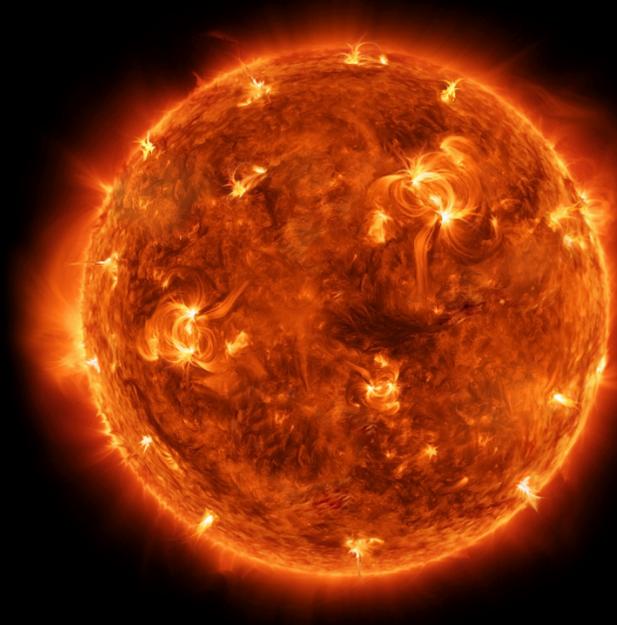


Credit: C3S LLC/Blue Skies Space

Mauve is the first satellite from UK-based Blue Skies Space Ltd. It is designed to measure the activity of stars in the Milky Way Galaxy, helping scientists understand their behaviour, powerful flares and their impact on nearby exoplanets.

Mauve is the first commercial space science satellite.

Science Priorities



Stellar flares: Some of the coolest stars are subject to large explosions (flares) that produce high-energy emissions, occasionally outshining the star itself. Studying these events helps scientists understand how magnetic fields accumulate and release large amounts of energy, and understand similar events produced by our Sun.



Hot stars: Hot stars emit abundant ultraviolet radiation, and Mauve will study both the youngest ones, surrounded by clouds of gas and dust, and some of the older ones, rapidly rotating and shedding material into surrounding disks of gas, affecting their evolution.

Science Priorities



Young exoplanet hosts: Young stars with planets still taking shape around them reveal the early stages of planetary evolution. By studying these systems, scientists trace how planets grow, migrate, and settle into their mature orbits — offering clues to the history of our own Solar System.



Binary stars: Systems where two stars orbit one another are vital for testing theories of gravity, stellar mass, and evolution. Because their mutual orbits can be measured precisely, binaries offer the most accurate way to determine stellar masses, anchoring models of how all stars live and die.

Satellite



Credit: C3S LLC/Blue Skies Space

Mauve is a small satellite in low-Earth orbit, equipped with a 13 cm telescope to observe stars in the ultraviolet and visible wavelengths.

Mauve was built by a consortium of European companies within 3 years of conception, a fast timeline for a space science satellite.

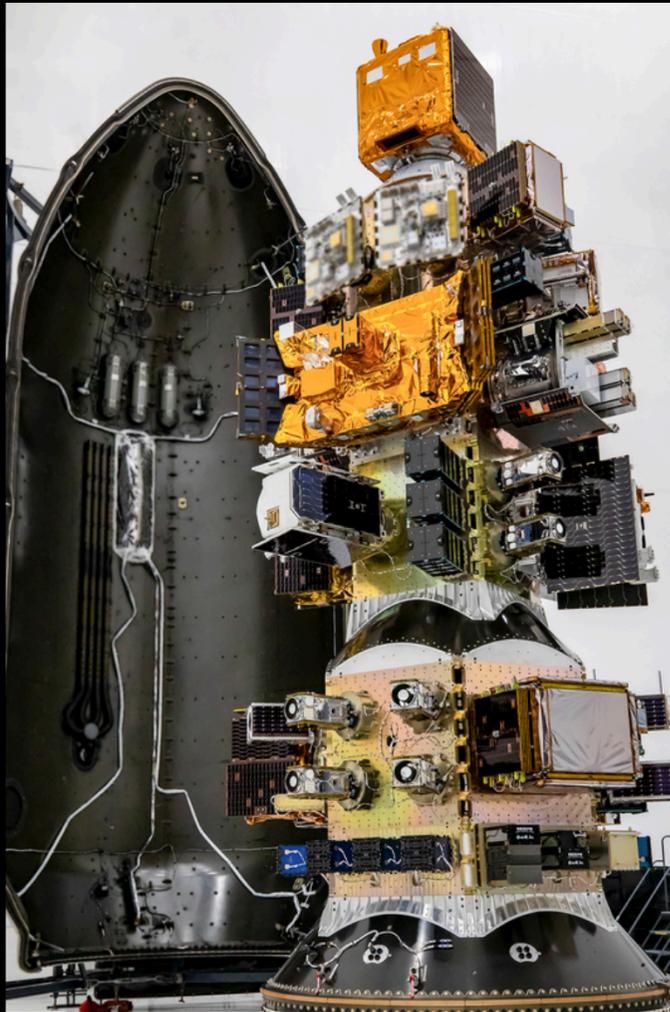
Technical Specifications

Telescope	13 cm Cassegrain
Satellite Mass	18.6 kg
Spectral Range	200 - 700 nm
Spectral Resolution	10.5 nm (max R = 65)
Sky Coverage (Declination)	-46.4 to 31.8 deg ICRS coord. (ep=J2000)
Orbit	Sun-synchronous LEO 510 km LTDN 10:30
Pointing Solution	High-performance Star Tracker and Gyro

C3S LLC provided Mauve's platform and led integration. ISISPACE provided the pointing solution.

The payload comprises a MediaLario telescope, Avantes spectrometers with a Hamamatsu detector and fibre optic cables from CeramOptec.

Launch



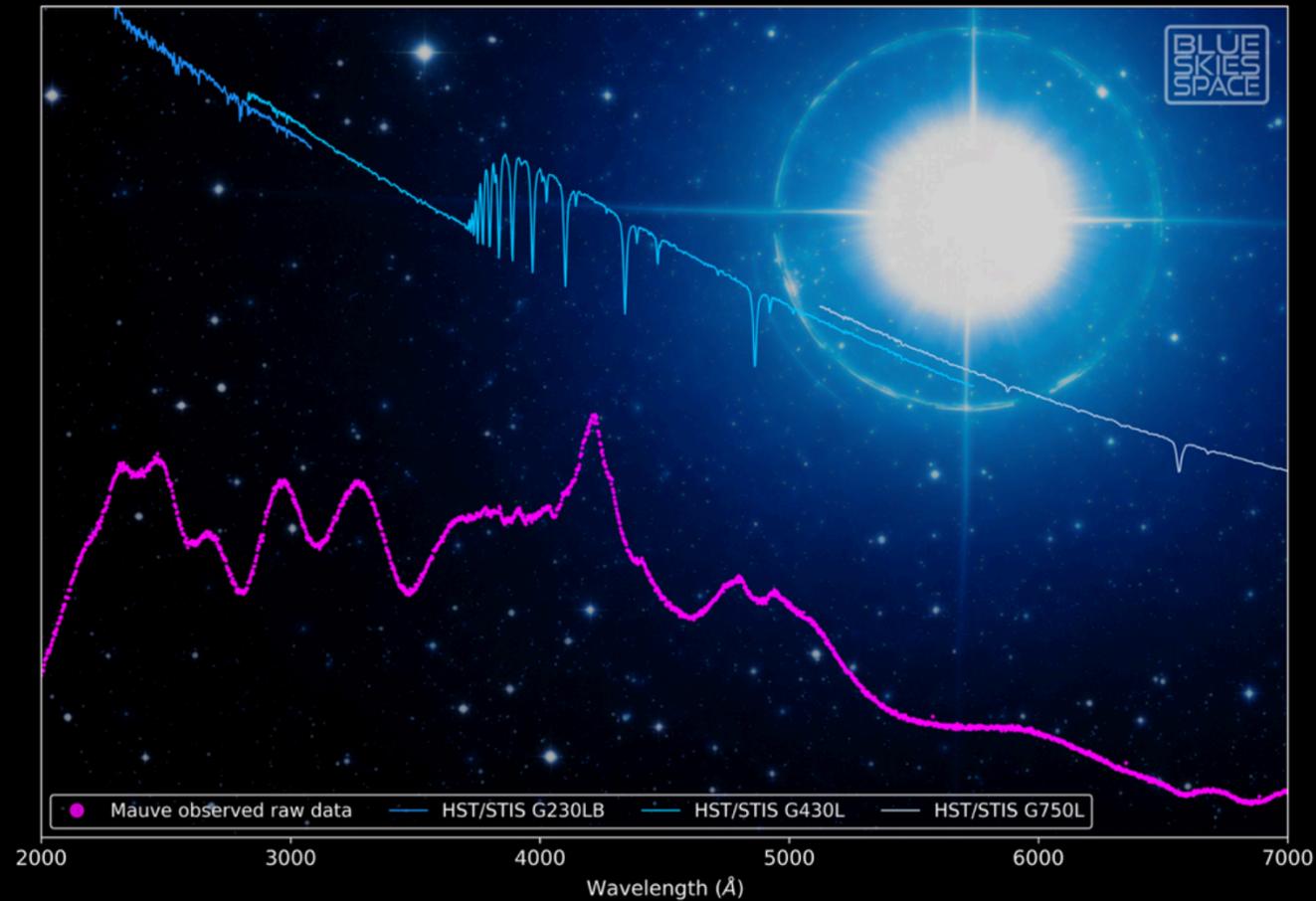
Credit: SpaceX

Mauve was launched on SpaceX's Falcon 9 at 18:44 GMT on 28 November 2025 as part of the Transporter-15 rideshare programme.

First contact with the satellite was made shortly after deployment.

Track Mauve in orbit: bssl.space/track-mauve

First Light



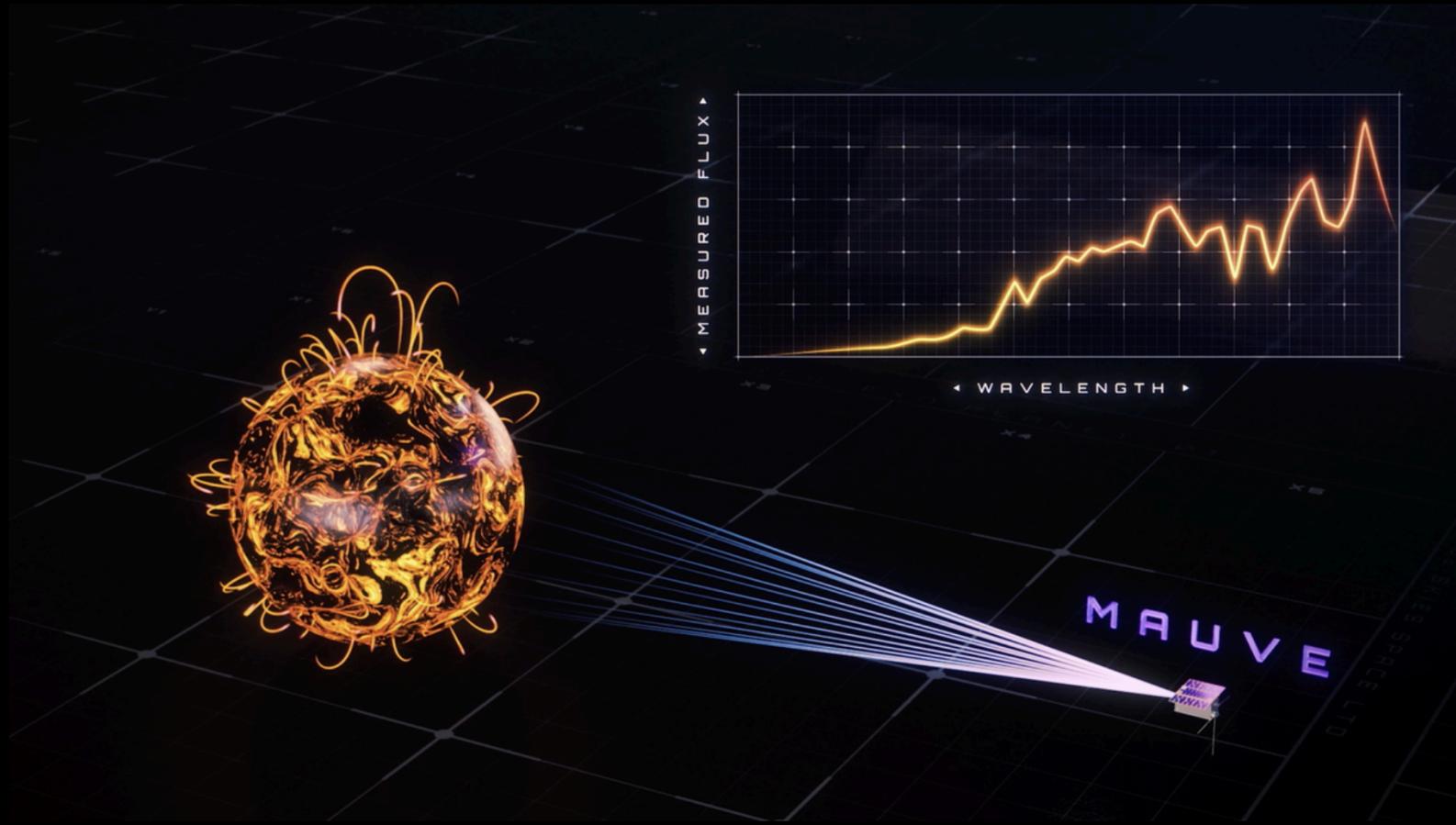
Mauve was pointed at its first calibration target, eta UMa, on 9 February 2026. Eta UMa is a bright, hot, blue-white star in the constellation Ursa Major, approximately 104 light-years from Earth.

The star shines brightly in ultraviolet light, making it an ideal calibration target for a UV observatory like Mauve.

Next milestone: Start of science operations (early 2026)

Pink: Spectrum of eta UMa acquired in a single capture by Mauve on 9 February 2026 with a 5s integration time. Blue: Hubble Space Telescope STIS spectra of the same star recorded by three grisms.

Science Programme



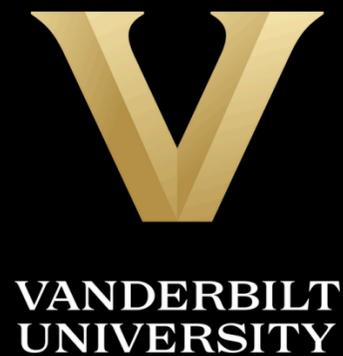
- Three-year stellar science programme
- UV spectrophotometry (200 - 700 nm)
- Global collaboration of scientists
- Thousands of observational hours each year
- Annual subscription for data access

Read the plan for the first year of operations:
arxiv.org/abs/2512.16675

Participating Institutions



Rice University



Western
Institute for Earth
& Space Exploration

Media Resources

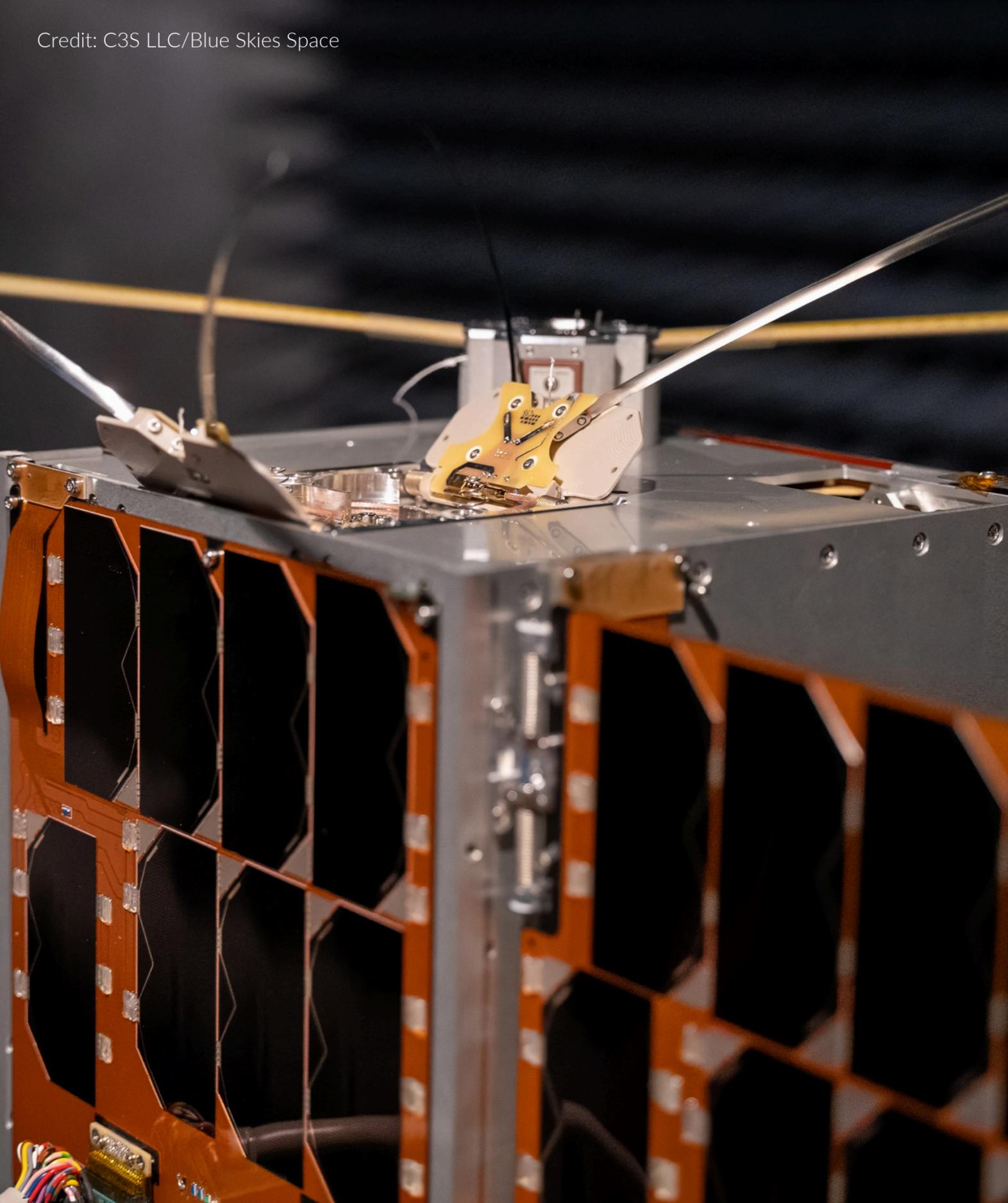


Credit: C3S LLC/Blue Skies Space



Credit: C3S LLC/Blue Skies Space

Media resources available for download at: bssl.space/mauve/media-kit



Learn more about Mauve: bssl.space/mauve

For media enquiries: bssl.space/contact

 @BlueSkiesSpace



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101082738 and was supported by the UK Research and Innovation (UKRI)'s Horizon Europe Guarantee Scheme.