

AGENCY

SOURCE team test their CubeSat's "voice" during Fly Your Satellite! antenna test campaign

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In brief

From 31 May to 2 June 2022, four students from the University of Stuttgart's SOURCE team embedded themselves within the CATR (Compact Antenna Test Range) at ESTEC in the Netherlands. As a [Fly Your Satellite!](#) third edition team, they have been busy building and testing their three-unit CubeSat prior to launch into space.

In-depth

— Happy students with ESA personnel and their CubeSat

eventually be used in flight for radio communication between SOURCE and its ground station. Their goal: measure the performance of the antennas when operating together, as they are intended to do in flight, to relay the satellite's data back to Earth; in effect, [testing their satellite's "voice"](#)!

Said a participating student, *"During the week we had many opportunities to discuss details of our project with experts and to see many interesting things on site. Many thanks to everybody who participated and ESA's Fly Your Satellite!"*

The students measured their hardware's performance in a number of different configurations in the CATR, allowing them to collect valuable data. They will now analyse this in order to determine whether the design they have developed will allow for successful communication at all stages of SOURCE's mission in orbit.

"The week at ESTEC was a great opportunity to use such a professional test facility for antenna measurements," explained a SOURCE student. *"The gained data will help us to verify our communication system and data and link budgets."*

For more updates, be sure to regularly check the [Fly Your Satellite! webpage](#).

The students brought with them a "look-alike" satellite mock-up, closely matching their real design's external dimensions.

Onto this model they carefully installed two antennas that will

— Students installing their CubeSat at the antenna test range.