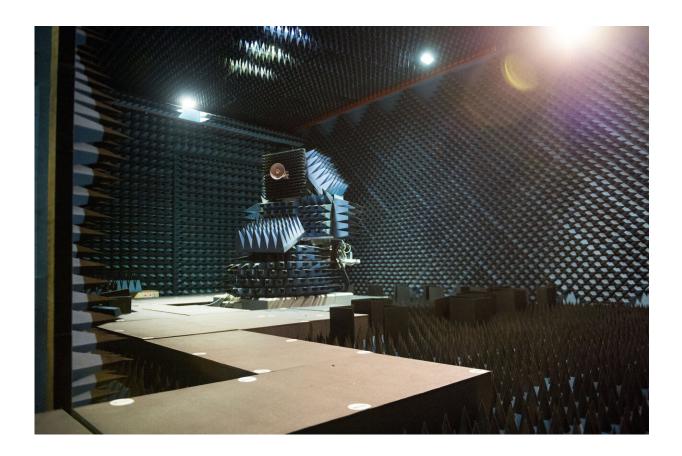


## **Image: Place for space testing**

July 15 2020



Credit: ESA-G. Porter

ESA's Compact Antenna Test Range at its ESTEC technical centre in Noordwijk, the Netherlands. This anechoic chamber is used to test space antennas of 1 m across or less, or else entire small satellites.

The CATR is screened against external electromagnetic radiation, while



their inside walls is covered with pyramid-shaped non-reflective foam to absorb signals and prevent unwanted reflections, mimicking infinite space.

In addition, a pair of wall-mounted parabolic cylindrical aluminium reflectors alter the shape of signals as they reflect them, as if they have travelled thousands of kilometres instead of a handful of metres.

The CATR is supplemented by the larger Hybrid European RF and Antenna Test Zone (HERTZ) for larger antenna or satellite testing, as well as a lab for the testing of candidate <u>antenna</u> materials.

Provided by European Space Agency

Citation: Image: Place for space testing (2020, July 15) retrieved 28 April 2024 from <u>https://phys.org/news/2020-07-image-space.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.