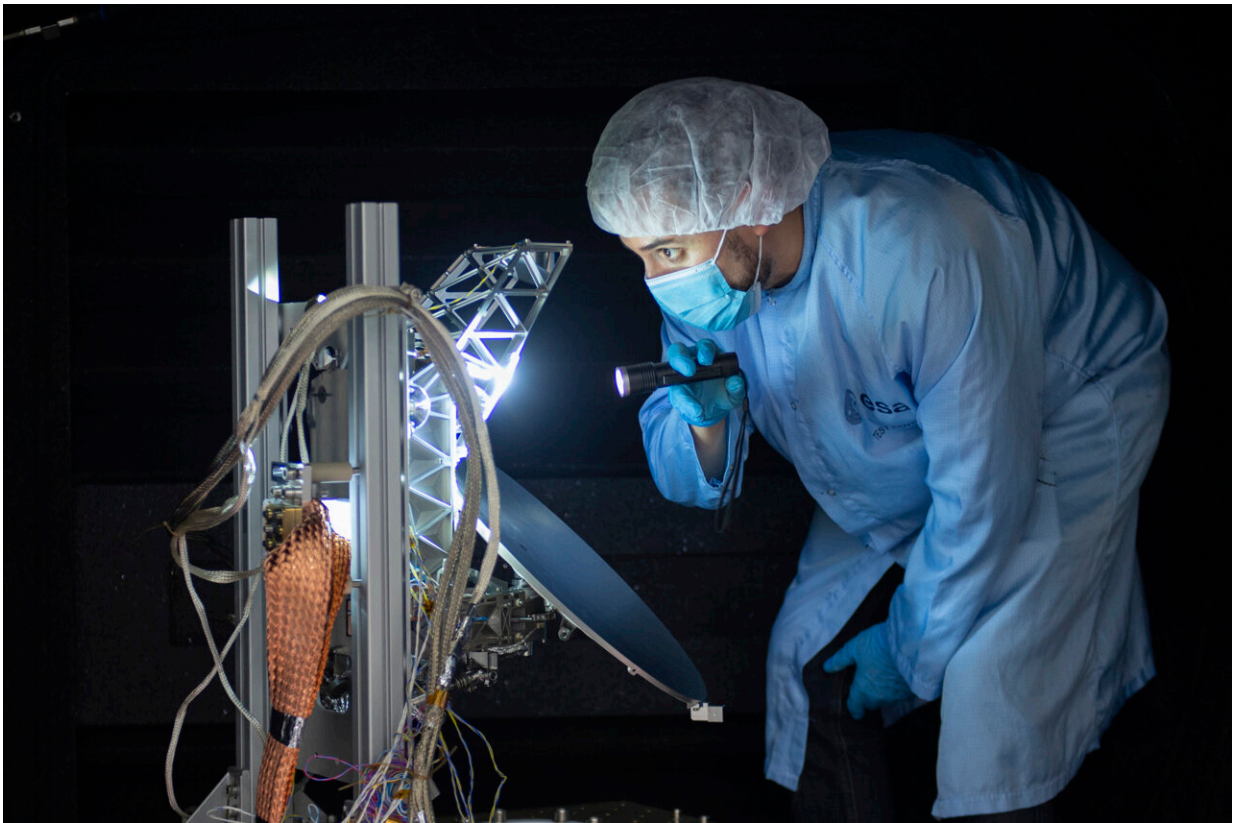


Image: Jupiter antenna that came in from the cold

June 1 2021



Credit: ESA-G. Porter

An instrument destined for Jupiter orbit is checked after completing eight days of cryogenic radio-frequency testing at ESA's ESTEC technical center in the Netherlands.

The Sub-millimeter Wave Instrument of ESA's Juice mission will survey the churning atmosphere of Jupiter and the scanty atmospheres of its Galilean moons.

Testing took place in ESA's custom-built Low-temperature Near-field Terahertz chamber , or Lorentz.

The first chamber of its kind, the 2.8-m diameter Lorentz [chamber](#) can perform high-frequency radio-frequency testing in realistic space conditions, combining space-quality vacuum with ultra-low temperatures.

"The successful test of the flight hardware inside Lorentz, follows an intensive commissioning phase." says ESA antenna engineer Paul Moseley. "This demonstration opens up a wide range of testing possibilities for missions to come."

Meanwhile the flight model of the SWI instrument's parent Juice spacecraft has itself reached the ESTEC Test Center, in preparation for a month long thermal vacuum [test](#) campaign.

Provided by European Space Agency

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