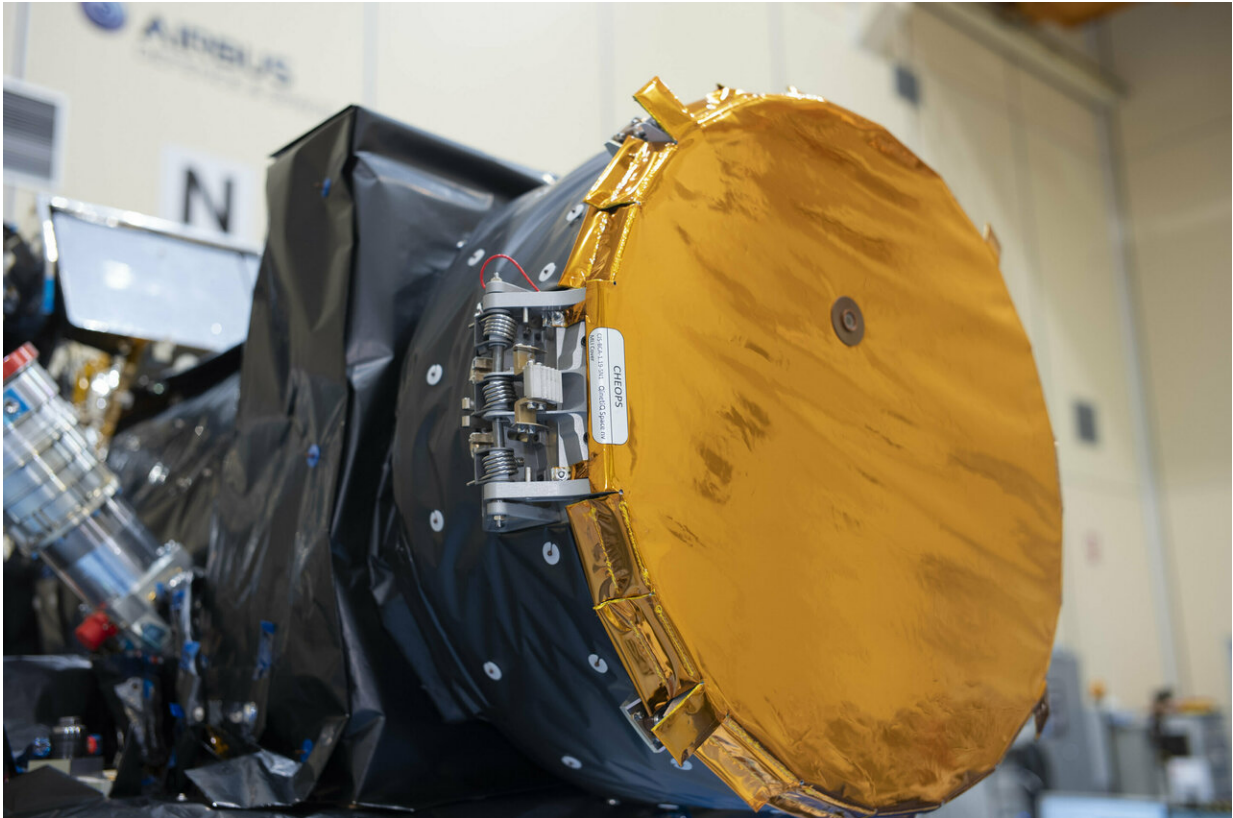


Image: Cheops in the clean room

March 12 2019



Credit: ESA – S. Corvaja

The copper-coloured baffle cover of our Characterising Exoplanet Satellite, Cheops, in the clean room at Airbus Defence and Space Spain, Madrid.

After completing spacecraft testing, the satellite has passed a very

important review that determined it is ready to fly. Cheops will be stored in Madrid for a few months before being shipped to the [launch site](#) in Kourou, French Guiana; launch is scheduled in the time slot between 15 October and 14 November 2019.

The baffle cover pictured in this image is designed to protect the [satellite](#)'s scientific instrument – a powerful camera, or photometer – during assembly and launch. Once in space, the cover will open, allowing light from stars to enter the telescope.

Cheops will make observations of exoplanet-hosting stars to measure small changes in their brightness due to the transit of a planet across the star's disc, targeting in particular stars hosting planets in the Earth-to-Neptune size range. The information will enable precise measurements of the sizes of the orbiting planets to be made: combined with measurements of the planet masses, this will provide an estimate of their mean density – a first step to characterising [planets](#) outside our Solar System.

Cheops paves the way for the next generation of ESA's exoplanet satellites, with two further missions – Plato and Ariel – planned for the next decade to tackle different aspects of the evolving field of [exoplanet](#) science.

Provided by European Space Agency

Citation: Image: Cheops in the clean room (2019, March 12) retrieved 18 April 2024 from <https://phys.org/news/2019-03-image-cheops-room.html>

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