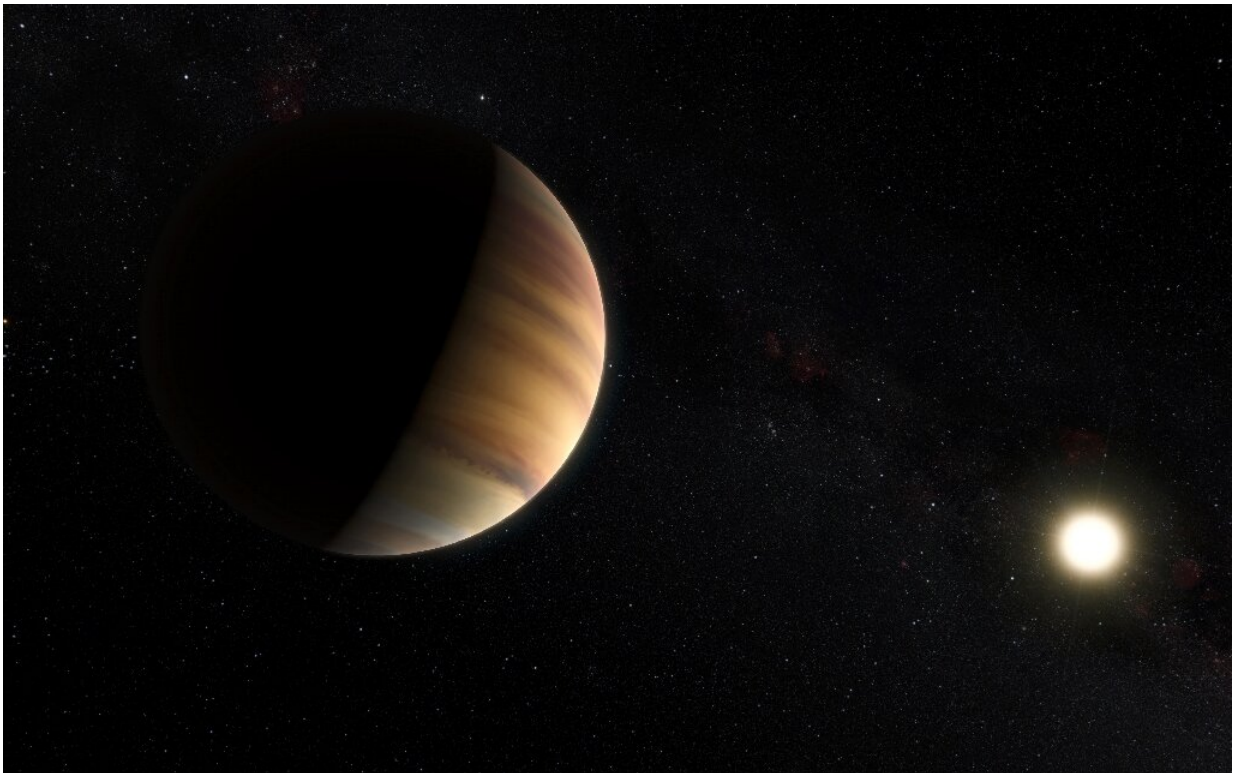


# Glitch delays launch of Europe's exoplanet hunter

December 17 2019, by Laurence Coustal

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CHEOPS is a 30-centimetre (12-inch) telescope designed to measure the density, composition, and size of numerous planets beyond our solar system, so-called exoplanets. This is an artist's impression of 51 Pegasi b, which orbits a star 50 lightyears from Earth

A technical rocket glitch during the final countdown Tuesday pushed

back by a day the blastoff of Europe's CHEOPS planet-hunting satellite, launch company Arianespace and Russia's Roscosmos agency said.

"During final countdown operations for Flight VS23, the Soyuz launcher's automated sequence was interrupted at 1 hour 25 minutes before liftoff," the company said in a statement.

The Russian-built rocket and its payload were "placed in a fully safe standby mode," said Arianespace.

Roscosmos said an analysis was under way to resolve the problem.

"The decision was taken to delay the launch to a new date: December 18 at 0854 GMT," exactly a day later, the Russian agency said in a statement.

Launch will take place from Europe's launchpad in Kourou, French Guiana.

CHEOPS is a 30-centimetre (12-inch) telescope designed to measure the density, composition, and size of numerous [planets](#) beyond our solar system, so-called exoplanets.

According to the European Space Agency, it will observe [bright stars](#) that are already known to be orbited by planets.

## **Planets everywhere**

"It will focus on planets in the super-Earth to Neptune size range, with its data enabling the bulk density of the planets to be derived — a first-step characterisation towards understanding these alien worlds," the ESA website states.

Nearly 4,000 exoplanets have been detected since the first, 51 Pegasi b, was identified 24 years ago.

"Since then, we have learnt that there are planets everywhere, that about one star in two has its own entourage of planets. Now, we want to go beyond statistics and study them in detail," mission chief David Ehrenreich told AFP.

CHEOPS, short for CHaracterising ExxOPlanet Satellite, will seek to better understand what exoplanets are made of—an important step in the long quest to unravel the conditions required for extraterrestrial life, but also to unlock the origins of our own home planet.

The satellite will orbit the Earth at a distance of 700 kilometres (435 miles), studying rocks orbiting stars several [light years](#) away.

The launch would be the third launch this year for the medium-lift Soyuz rocket.

The launcher also carries a COSMO-SkyMed Second Generation satellite for the Italian Space Agency, and three smaller payloads: a nanosatellite from Italian company Tyvak; and two from France's space agency, the CNES.

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