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Title

PERSEUS and Minerva: Firing tests

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Abstract

The PERSEUS (Projet Etudiant de Recherche Spatiale Européen Universitaire et Scientifique) program launched, financed and managed by the Direction of Space Transportation of Centre National Etudes Spatiales (CNES) aims to make students discover the space field.

Today, one of the stepping stone of the project is to launch the sounding rocket ASTREOS 1 by the end of May 2025. This bi-liquid rocket is equipped with the 5kN LOX/Ethanol MINERVA Engine. MINERVA engine, which has been designed some years ago by students in the frame of PERSEUS program, has been tested on the site of ArianeGroup SAS in Vernon in summer 2022, on the test facility P20. The objective was to assess the specimen regarding the necessary performances related to the launch of ASTREOS 1. Five firing tests were done in order to qualify the new test bench P20, to determine the performances of the engine and to choose between different configurations and materials for the thermal protection.

References