
The Calibration and Test Unit of MORFEO: the path towards the final design

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Abstract

The Calibration Unit (CU) of MORFEO, the Multiconjugate adaptive Optics Relay For ELT Observations, is a complex optomechanical subsystem used to project on the telescope NGS and LGS focal planes a large number of light sources at different wavelengths. These sources are needed to run calibration, verification and test procedures on MORFEO at the Extremely Large Telescope (ELT). This subsystem will play a critical role not only during operations, but also during the Assembly, Integration and Verification (AIV) phase, both in Italy, when it will be used in the Test Unit (TU) configuration, including a Deformable Mirror (DM), and in Chile. This paper intends to define a path towards the final design, describing possible solutions to solve or mitigate the main criticalities identified so far.

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