

First scientific results from the COLIBRÍ robotic telescope and perspectives at OHP with Mistral@T193, Providence, and ELIXIR

COLIBRÍ is a 1.3-m robotic telescope equipped with a three-channel panchromatic camera, enabling simultaneous observations from the visible to the near-infrared. Designed for time-domain astronomy, it is characterized by an exceptional rapid-response capability by being able to react to transient alerts in less than 15 seconds.

Developed through a French–Mexican collaboration, COLIBRÍ has been motivated and optimized for the follow-up of the alerts from the Franco-Chinese SVOM satellite, with the goal of improving our understanding of the origin and physics of gamma-ray bursts (GRBs), as well as their applications in cosmology. Beyond this primary objective, it contributes more broadly to time-domain astrophysics, including the follow-up of fast radio bursts (FRBs), the search for optical counterparts of gravitational-wave events, and the study of a wide range of transient phenomena.

Located at the Observatorio Astronómico Nacional in the Sierra San Pedro Mártir (Mexico), COLIBRÍ has been in scientific operation since January 2025. We present its instrumental concept, on-sky performance, and first scientific results.

This contribution will also discuss the perspectives offered by current and upcoming observational facilities at the Observatoire de Haute-Provence (OHP), including Mistral mounted on the T193 telescope, Providence, the future 2.52-m telescope, and ELIXIR, a wide-field survey currently under deployment.