

# Introduction



## gSTAR DATA MANAGEMENT AND COLLABORATION PLATFORM

### ✓ About gDMCP!

The gSTAR Data Management and Collaboration Platform (gDMCP) is a collaboration between Astronomy Australia Limited (AAL) and Swinburne University of Technology. It aims to provide Australian-based astronomers with a mechanism through which they can easily collaborate and share data while protecting their data access rights. It facilitates the process of data publishing and indeed encourages it. The platform provides three modes of data publishing.

- The first mode is **limited data publishing** within a science team. In this mode, the system provides small to moderate teams with a private data sharing platform, with the datasets only accessible to team members. The platform offers features such as easy to use programmatic access to the data repository via RESTful APIs, and fast access from gSTAR as the preferred processing platform. To ensure the data quality in preparation for a public data release, the system enforces a standard metadata model on the added data products based on the standard TAPObs metadata model.
- The second mode is **public data publishing**, where the data is accessible to the wider astronomy community. Through the requirement that a detailed metadata model exists for each data product, the process of moving data products between the two publishing modes is seamless with minimal effort. This significantly facilitates the process of data publishing. Each team can fully determine when they want their data to be published to the astronomy community. The system also supports using digital object identifiers (DOIs) as a reference for the published data products (or product catalogues).
- The third mode is the **managed data publishing** mode. This mode aims mainly to help to publish datasets associated with a publication. In this mode, the gSTAR data management team will assist the dataset owner to prepare and publish their dataset.