

ABSTRACT

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The VISTA, OmegaCam and GES Science Archives

The Wide Field Astronomy Unit (WFAU) are responsible for the WFCAM and VISTA Science Archives, which present a queryable web interface to a relational database management system of advanced science-ready products derived from its associated large X TB store of digital survey images. We have been the main access for the UKIDSS surveys and most of the VISTA Public Surveys allowing users to easily access and manage the large amount of survey data by constructing and executing efficient science queries on tables which are up to billions of rows in length, with options for simple visualisation of the results as well as full access in a variety of formats including support for the Virtual Observatory (VO).

Scientists can select data using a wide range of attributes: magnitudes, colours, sizes, type for example. We have developed sophisticated synoptic components to our archive design which allow scientists to search for moving objects and variable objects.

Recently we have added VST-ATLAS and the Gaia-ESO Spectroscopic Survey to our responsibilities. We will discuss our new work that will allow scientists to make the best use of data from all of these different surveys, including improved cross-matching facilities, better data visualisation services, multi-wavelength PSF matched catalogues and an improved MyDB programming-querying environment which makes use of the VO.