The GIRAFFE Archive (http://giraffe-archive.obspm.fr) aims at providing access to all reduced spectra from released observations with the GIRAFFE multi-fibre spectrograph (ESO/VLT). The development is in progress to allow the users to retrieve 1D or 3D spectra, according to VO standard.

Key words: Technique: spectroscopic.

1. INTRODUCTION

The medium resolution GIRAFFE spectrograph is mounted on one of the Nasmyth focus of ESO VLT/UT2 (Pasquini et al., 2002) and has been collecting data for four years. Its multiplex facility allows the use of three different fibre configurations:

- Medusa (MED), where 135 individual fibres can be deployed inside the 25' diameter field of view,
- IFU, where 15 separate 4x6 micro-lens arrays (2''x3'') can be deployed in the field of view,
- Argus (ARG), where a single central 22x14 array is used. Two spatial scales are available: a sampling of 0.52 per micro-lens and a total aperture of 12''x7'', and a sampling of 0.33 per micro-lens with a total coverage of 6''6x4''.

The raw data are released one year after observation and are available on the ESO science archive (http://archive.eso.org). The instrument produces a large amount of data (more than 4000 scientific observations from March 2003 to September 2005), and the proportions of use are 68 %, 9 % and 23 % for MED, IFU and ARG modes respectively.

The GIRAFFE Archive is developed in Observatoire de Paris and is part of the federation of VO projects (Simon et al., 2006). It aims at distributing the science ready data, available via a web interface and providing VO access to 1D and 3D data.

2. MINING GIRAFFE DATA

Up to now, the sample available in the GIRAFFE Archive is a test sample, gathering only the early GIRAFFE observations, reduced using standard calibrations. The automatising of the ESO pipeline is almost ready and will soon allow the feed of the archive with all the released observations done with the GIRAFFE spectrograph.

The on-line database uses Pleinpot (8.11.4) and Postgres (8.1.2). The web interface is reachable at http://giraffe-archive.obspm.fr, and the user can search for observation files, and download reduced frames. An additional search tool, using detailed criteria for mining individual objects (inside multi-object observations), will be implemented.

3. SIMPLE SPECTRUM ACCESS

The individual spectra can be accessed using position criteria via the SSA protocol (Simple Spectrum Access). The service is under development in the GIRAFFE Archive. By combining the fibre extraction function, allowing the access to one single spectrum, with the SSA service, it will be possible to directly import individual spectra in applications such as VOSpec.

4. EURO3D FORMAT

About one third of GIRAFFE data are integral field observations (IFU and ARG), and it has been decided to provide an output of the archive in the Euro3D format.
Figure 1. Snapshot of interface with Aladin using Plastic (see Chilingarian et al., 2007). The positions of the fibres from a Medusa observation (red squares) are plotted over a Digitalised Sky Survey image in the field of the globular cluster NGC 6397.

(Kissler-Patig et al., 2004). This format is suited for the three different fibre configurations in GIRAFFE.

A conversion function has been coded, using the Cfitsio library, to convert on-the-fly the reduced data format from GIRAFFE into a standard Euro3D FITS file (Kissler-Patig et al., 2003).

The output Euro3D files, combined with the tool developed by Chilingarian et al. (2007), give the possibility to have a quick look of GIRAFFE data in the spatial dimensions with Aladin (Fig. 1) and spectral dimension with VOSpec.

REFERENCES

Chilingarian, I., Bonnarel, F., Louys, M., et al. 2007, these proceedings


