



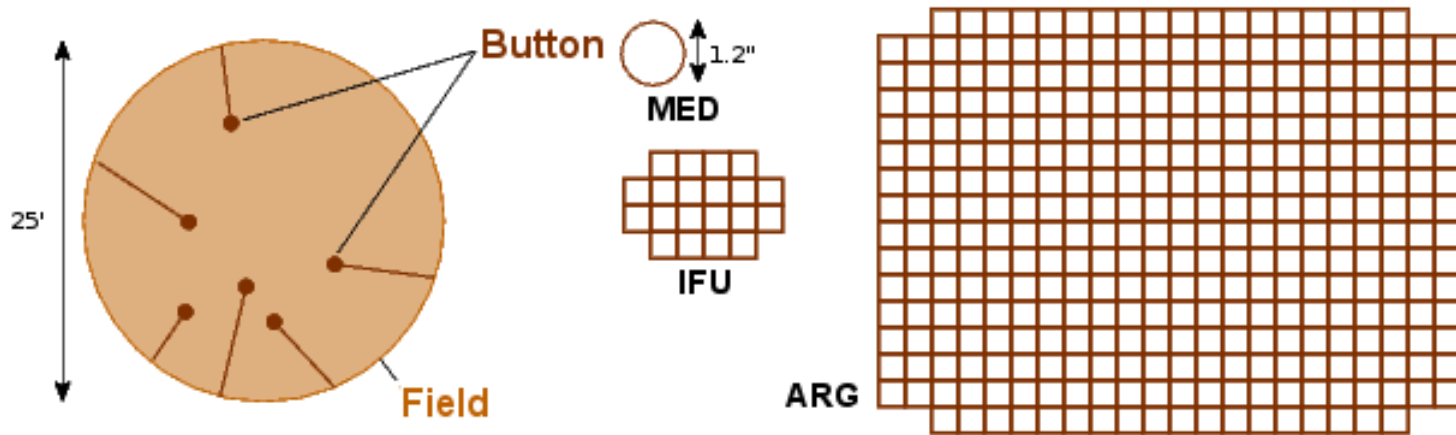
# Nouvelles fonctionnalités OV de l'Archive GIRAFFE

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# GIRAFFE Spectrograph

- Fibre system :
  - In one **Field** exposure : several fibre **Buttons**
    - Medusa (MED) : ~135 individual targets
    - IFU : 15 arrays of 20 fibres
    - Argus (ARG) : 1 single array of 300 fibres

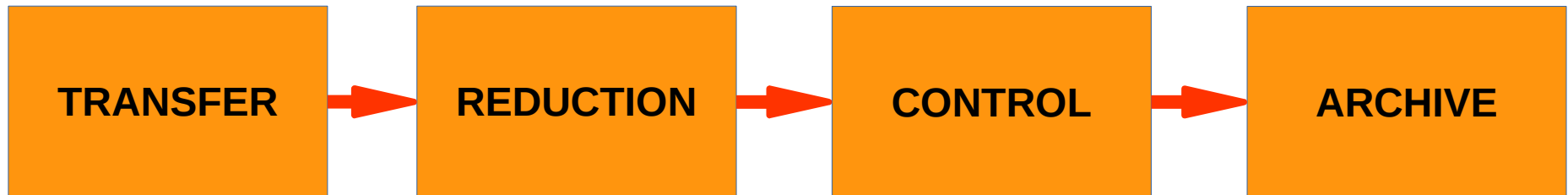


# GIRAFFE Observations

- Wide range of scientific topics :  
    stellar, interstellar, Galactic and extragalactic studies.
- Since Spring 2003, ~140 scientific exposures per month (~6600 h in total)
- Raw data can be downloaded from ESO archive.
  - Data are not searchable using individual target coordinates, only field centres
  - No advanced science products are available

# GIRAFFE Archive

- Provide and make available reduced science data
  - from Web interface <http://giraffe-archive.obspm.fr>
  - from SSA services in the VO



# GIRAFFE Data Query

Field or Button

Search for data products

Field  Button

Objects

Target :

Radius:  [']

ProgId:

Magnitude:  ...

Exposures

Night:  ...

Seeing:  ...

Airmass:  ...

ExpTime:  ...

Fibres

# objects:  ...

# sky:  ...

SimCal:

- Yes  
 No  
 Any

Mode:

- Medusa  
 IFU  
 Argus

Set-up

Resolution:  ...

Wavelength:  ...

Grating:

- High  
 Low  
 Any

ArgScale:

- 1:1  
 1:1.67  
 Any

Spectra

SNR:  ...

Sky subtracted:

Velocity corrected:

submit

reset

using [Plainpot Software](#)

# GIRAFFE Data Products


- Content (data up to end of 2012) :
  - 12 000 Field data products
    - 6550 MED, 1600 IFU, 3850 ARG
  - 608 000 Button data products
    - 585 000 MED, 20 000 IFU, 3850 ARG
- Files :
  - Reduced spectra (+errors)
  - Reduction logs
  - Datacubes (ESO3D)

## Description of the FIELD data product : GIRAF.2009-01-28T06:14:05.332

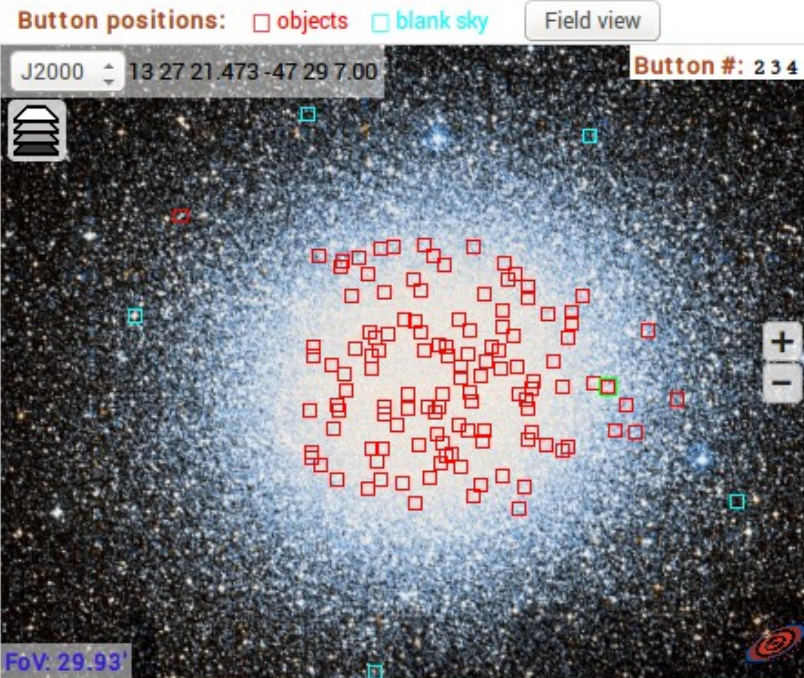
Field name: NGC5139  
Field centre: 13 26 45.8 -47 28 36  
ProgID: 082.D-0424(A)

[Header](#) [Reduction Log](#)  
[Raw data ESO archive](#) [ProgID Description](#)

Mode: MED  
Set-up: HR4  
Wavelength: 418.8 439.2  
Resolution: 20350  
SimCal: NO  
#Fibres: obj./ sky / tot. 122 5 127  
Sky subtracted avail.: YES

Night: 2009-01-28   
Seeing: 2.01  
Airmass: 1.441  
Exposure time: 2775

	min	max
SNR:	7.6	35.5
Magnitude:	10.862	14.732



## Retrieve spectra

- [Download FIELD data](#)

[Native format](#) [Tar archive](#)  
[Sky sub. native format](#)

## Search related data products

- Go to [Buttons List](#)
- Select all FIELD data products:
  - with the same name NGC5139
  - from the same scientific program 082.D-0424(A)
  - from the same night 2009-01-28
  - Search around current position (13 26 45.8 -47 28 36) with radius  arcmin

[Submit](#)

# FIELD

## Description of the BUTTON data product : GIRAF.2010-08-29T02:50:00.698 - 18

Object name: ID3\_M064  
Button #: 18  
Index: 2  
Object Position: 20 40 09.12 -06 37 41.7  
SNR: 125.0  
Magnitude: 14.290

Field name: INNER\_DISK\_3  
Field centre: 20 40 17.4 -06 42 22  
ProgID: 085.B-0607(C)

[Header](#) [Reduction Log](#)

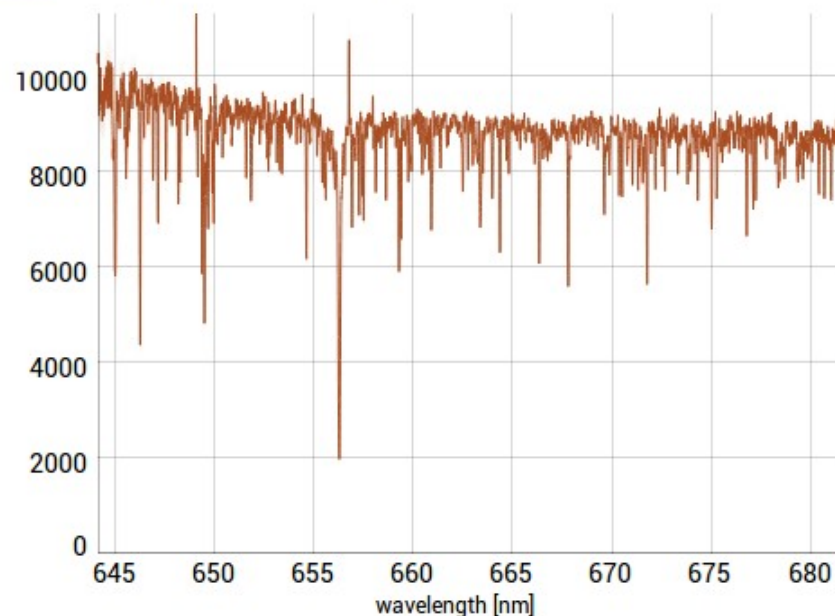
[Raw data ESO archive](#)

[ProgID Description](#)

Mode: MED  
Set-up: HR15N  
Wavelength: 647 679  
Resolution: 17000  
SimCal: NO  
#Fibres: obj. / sky / tot. 86 / 3 / 89  
Sky subtracted avail.: YES  
Night: 2010-08-29 <sup>AP</sup>  
Seeing: 1.12  
Airmass: 1.051  
Exposure time: 2719

### MEDUSA spectrum

Without Sky subtraction  With sky subtraction



# BUTTON

## Retrieve spectra

• [Download BUTTON data](#)

[1D spectrum](#)

[Sky sub. 1D spectrum](#)

## Search related data products

• Go to [FIELD data product](#) [Buttons List](#)

• Select all BUTTON data products:

with the same name ID3\_M064

from the same scientific program 085.B-0607(C)

from the same night 2010-08-29

Search around current position (20 40 09.12 -06 37 41.7) with radius  arcmin

[Submit](#)



# **GIRAFFE Data Visualisation :**

## **SCubOX**

**(Spectral Cube Online eXplorer)**

*Chilingarian et al (2008) : VO Paris Euro3D client*

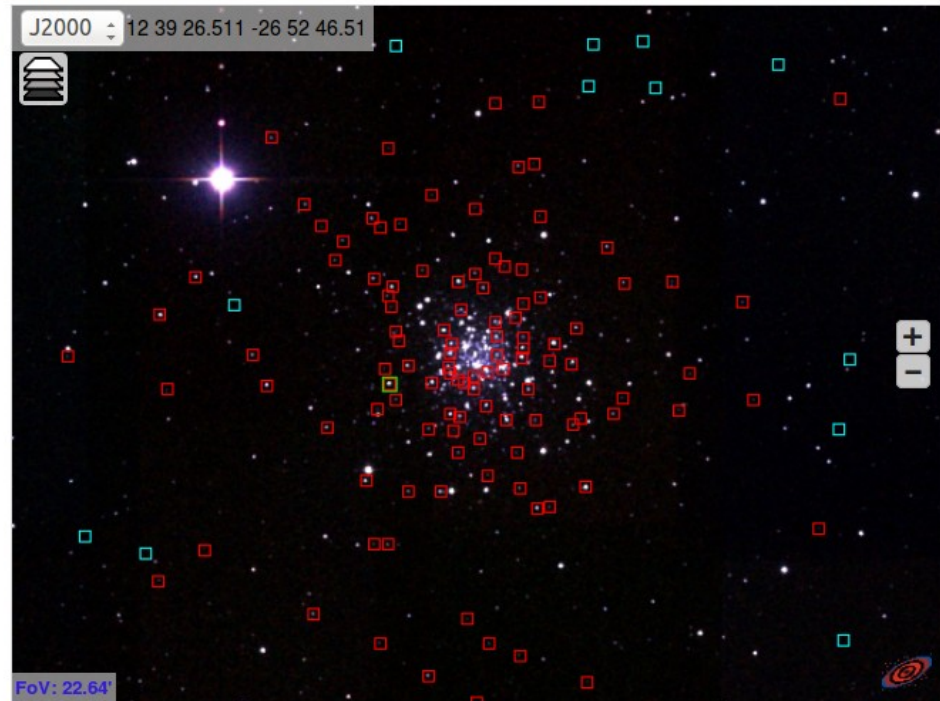
- Visualises spectral and spatial dimensions
- Uses a web browser
- Thought outside the GIRAFFE Archive
  - Cube/ESO3D format
  - Disconnected from the Archive database

# GIRAFFE Data Visualisation (FIELD)

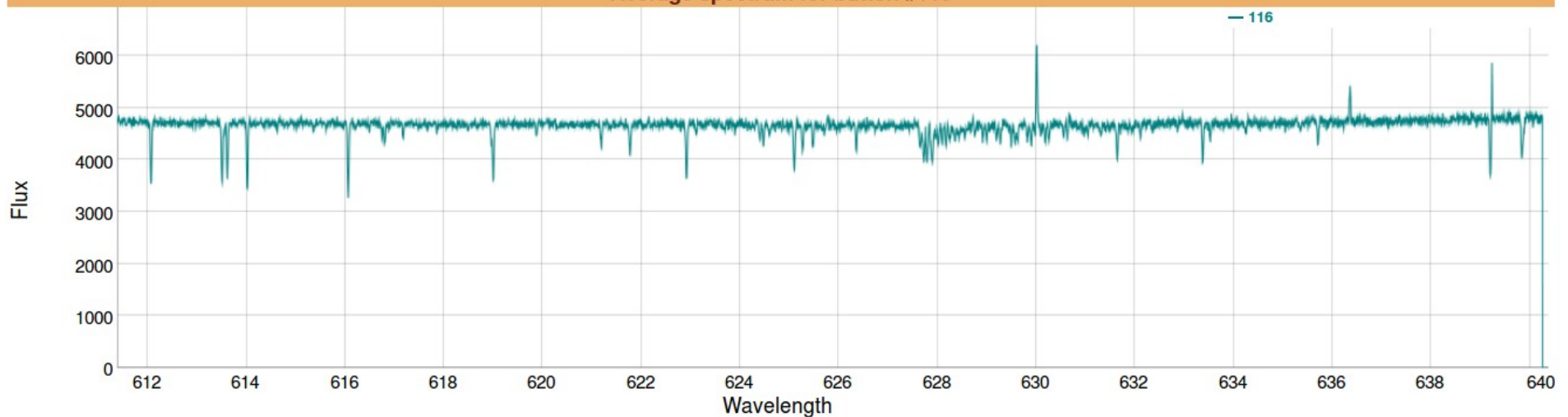
Field view of GIRAF.2004-07-04T23:52:47.053

Field name : NGC4590  
Field centre : 12 39 28.02 -26 44 32.3  
Seeing : 0.740  
Airmass : 1.103  
Wavelength : 611.40 - 640.39

Button # : 116  
Object position : 12 39 37.62 -26 45 15.5



Average spectrum for button #116



# GIRAFFE Data Visualisation (BUTTON)

Spatial projection of GIRAF.2005-04-30T04:43:47.239 number 0

**IMAGE**

Expert mode  
 OFF

Opacity

Spectral integration  
1 channel

Image color scale  
linear

Grid  
 OFF



**INFOS**

Spectral integration channel :  
450 508 nm

Object : TBD

Button centre : 15 16 49.82 -45 39 1.8

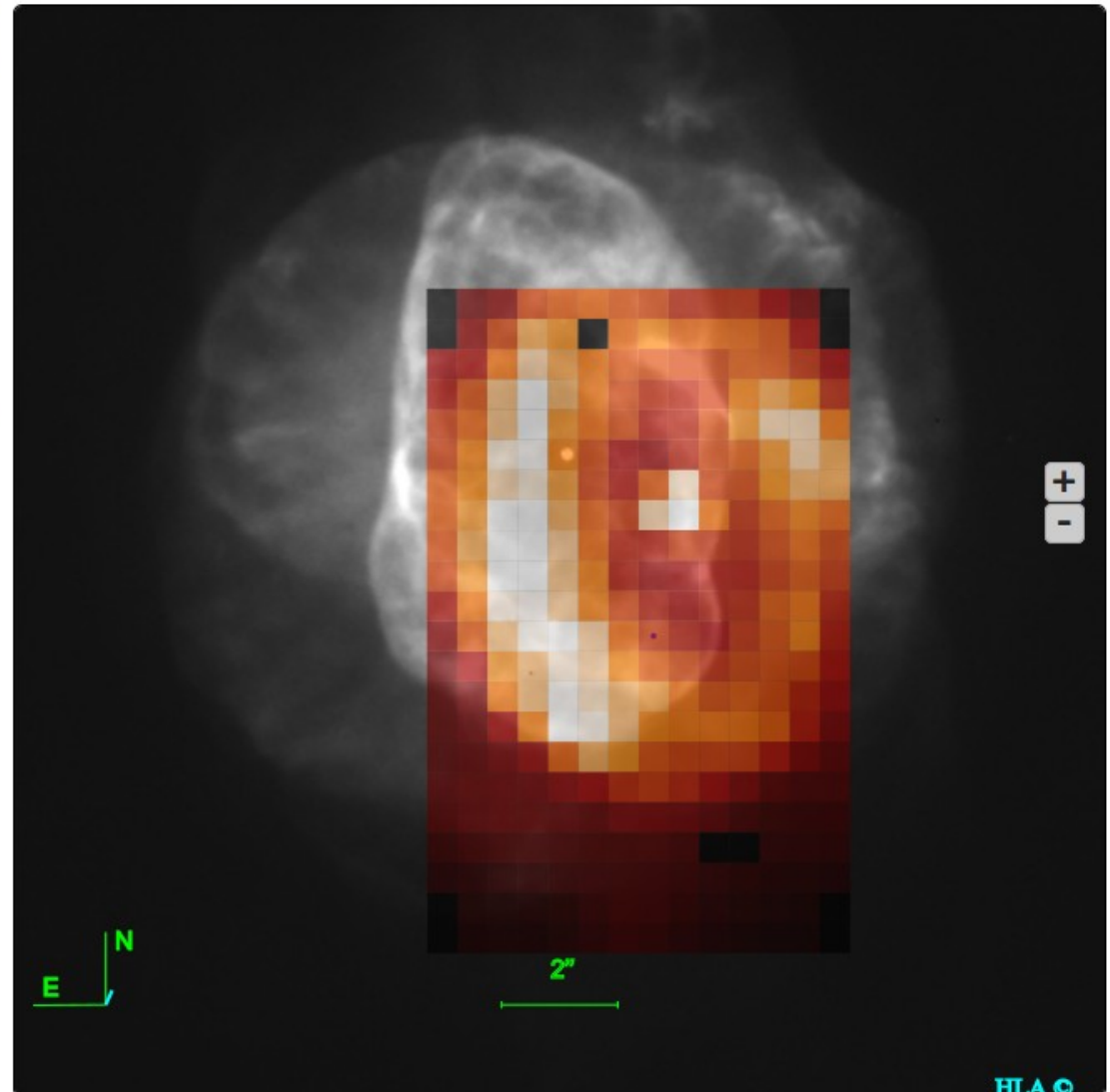
Seeing : 0.625

Airmass : 1.083

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Field name : NGC5882

Go to : [Field view](#)



# Perspectives

- Add a catalogue output for BUTTON queries
  - Export in Topcat (Xmatch ...)
- Add advanced mode in SCubOX
  - Datacube spectral visualisation
  - SAMP connexion to Aladin, VOSpec, ...
- Interface SCubOX with multi-object data and data cubes from other instruments (tests with CALIFA survey)

**Images**

Mode: select

Opacity:

Map: 1 channel projection

Image color scale: Log

Grid:  OFF



**Infos**

**Spectral Integration channel**

**Object** TBD

**Button centre** 14 11 52.08 -51  
26 23.1

**Seeing** 0.765

**Airmass** 1.188

**Field name** Hen2\_104\_nebula

[Field view](#)

