IVOA @ Spanish VO

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1. A bit of history: CAB

- Centro de Astrobiología (CAB, INTA-CSIC) hosts the largest Spanish astronomical data centre and has a large experience in the development and exploitation of astronomical archives.

- Our first archive-related activities started in 1998 with INES, the archive and distribution system of the IUE satellite.

- 18 archives presently managed at CAB (GTC, Calar Alto, ALHAMBRA,...)

INES
IUE Newly Extracted Spectra

INES Principal Centre

Welcome to the INES Principal Centre operated by the Laboratory for Space Astrophysics and Theoretical Physics (LAEFF)

• Calar Alto	• COROT
• DUNES	• DSS-63
• GASPS	• GAUDI
• GTC	• INES
• OMC	• Stars with Debris and Planets (not yet available)
• X-exoplanets	• ALHAMBRA
• CMC-15	• Joan Oró
• Mark-I	• REECL-SQM
• SVO Moving Object Catalogue	• The SVO hot subdwarf archive

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1. A bit of history: SVO
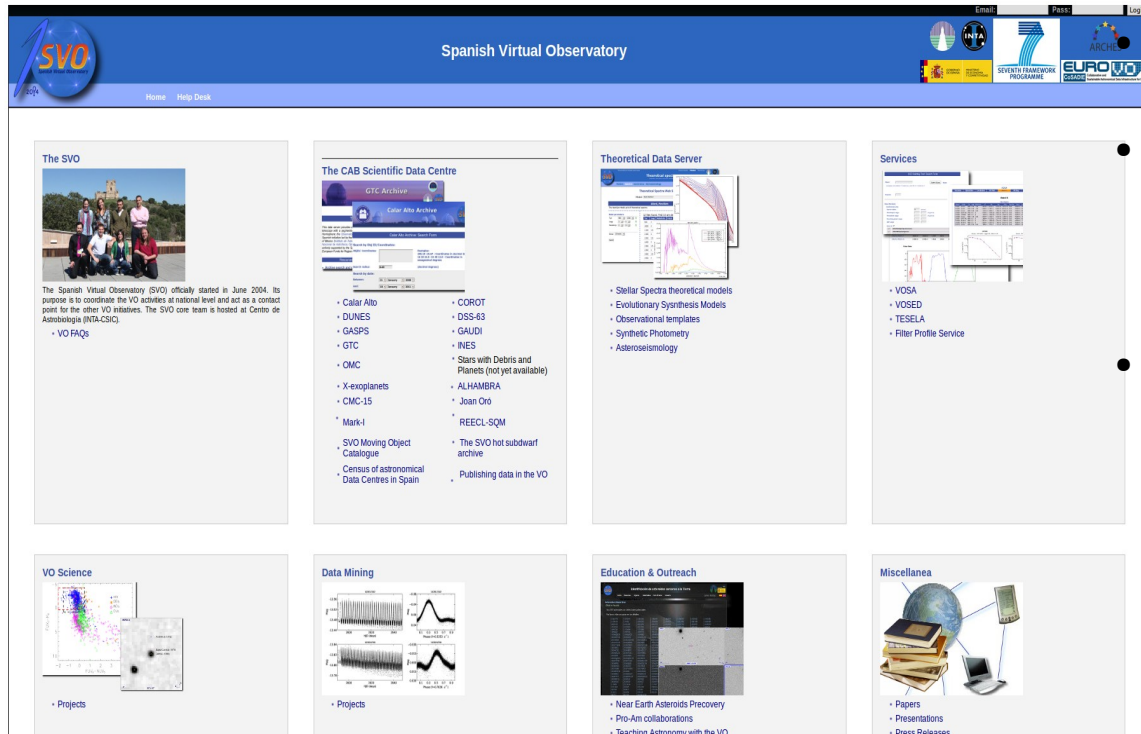
http://svo.cab.inta-csic.es

- The Spanish Virtual Observatory (SVO) is hosted at Centro de Astrobiología.

- SVO officially joined IVOA in June 2004.

- Funded by regional, national and European (FP6, FP7, H2020) programmes.

- **Goals:**

- Coordinations the VO activities at national level.
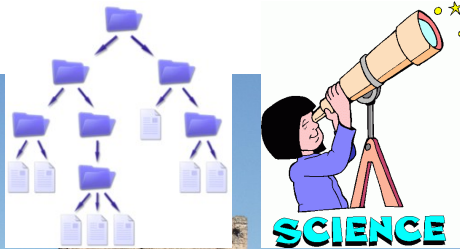- National contact point for the other VO initiatives.

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ObsVirtEsp
@ObsVirtEsp España
El Observatorio Virtual Español (SVO) e...
que coordina las actividades de VO a niv...
http://svo.cab.inta-csic.es

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1. The SVO team

- Not a large group (six FTEs)

- Major strengths:

  - Multidisciplinarity

  - Complementarity

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2. VO standards implemented at CAB

- 7 SSAP: Corot, IUE, Gaudi, OMC, Arches…

- 3 SIAP: GTC, CAHA, Alhambra.

- 8 ConeSearch: Spitzer, Ask, Tesela, CMC15…

- 39 SSAP for collections of theoretical spectra.(BTSettl, Kurucz,...)

- 36 SSAP for synthetic photometry of theoretical models for 3165 filters.

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     <PARAM name="Publisher" utype="Curation.Publisher" ucd="meta.organization;meta.curation" value="Data Archive Unit / Center of Ast
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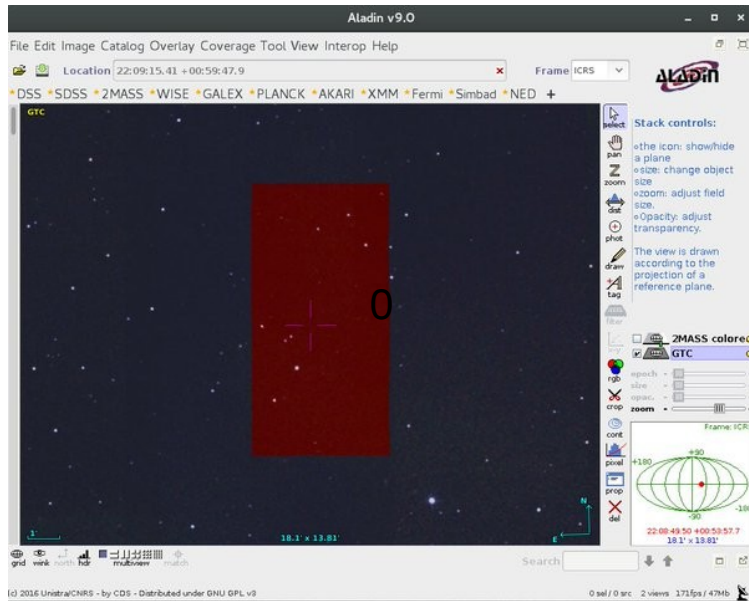
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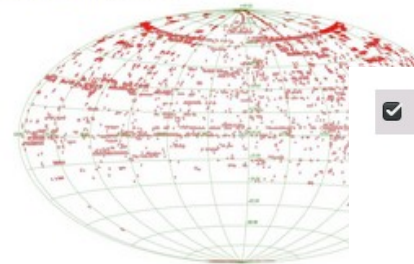# IVOA @ Spanish VO

2. VO standards implemented at CAB

HIPS (GTC)

MOC

Large number of MOCs:

- GTC, CAHA, catalogues.
- Extinction maps.
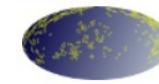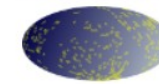
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2. Data access
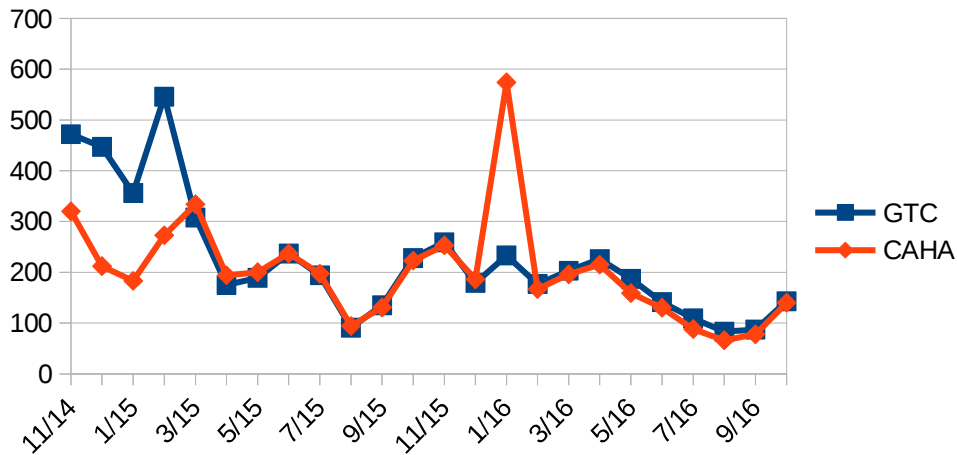
Both services have similar access.
GTC has 1816 differents IPs
CAHA has 3152 differents IPs

Service Limits:

- Search radius limited to 10deg to avoid whole archive searches (radius. 180deg)

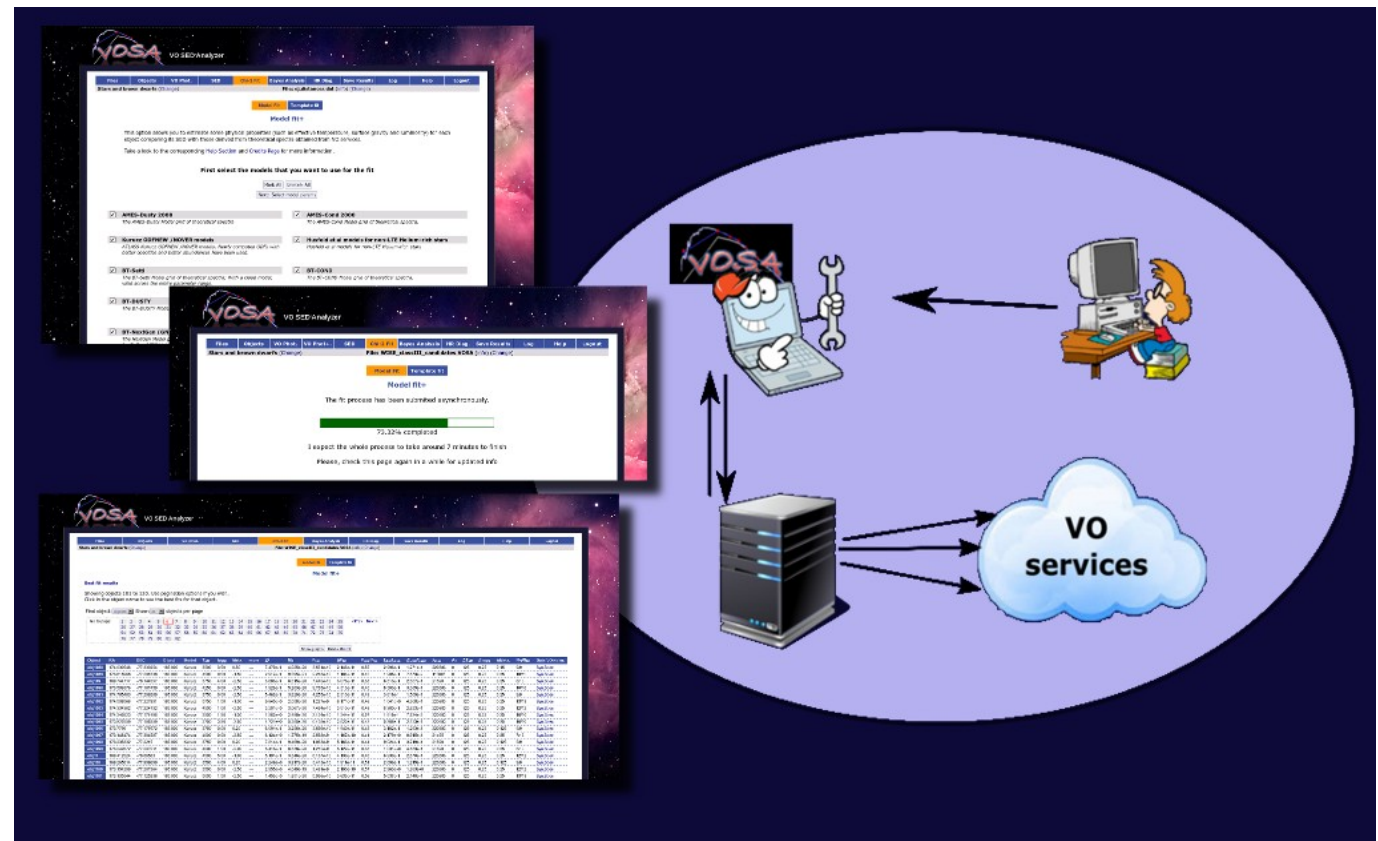- Validators are not included in the above graph.

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2. Management of queries

- All our services work in a synchronous way.
- VOSA also implements asynchronous capabilities.

VOSA (Apps 3)
Carlos Rodrigo

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3.Support to Spanish Data Centers

In order to provide support to the data provider community, we work in two different scenarios:

- **Data builders who do not want to manage an archive**. We offer them to take care of all archive-related activities. This is the case for all the archives available at CAB data centre.

- **Data builders who do want to manage the archives** but need support to make them VO-compliant.

  - Activities:

    - Community workshops.
    - Development of publishing tools.

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3.Support to Spanish Data Centers

First workshop on data publishing that took place at CAB in March 2015

Workshops to bring together SVO staff with Data providers: interchange of ideas and requirements.

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3.Support to Spanish Data Centers

We have developed a couple of tools (SVOCat and MySpec/Myimg) to ease the publication of spectra, images and catalogues.

SVOCat Documentation

Version 0.4, Apr 2014, author: Carlos Rodrigo

| Home | Download | Documentation | Examples | Credits | Help-Desk |

1. Introduction
2. Download
   2.1. Extract
   2.2. Permissions
3. The files
4. Example

(You can see this documentation as a single web page if you wish)

Introd

SVOCat
web pag

CENTRO DE ASTROBIOLOGÍA		
Title: MySpec-MyImg		
Subtitle:Tools for publication of spectra and images in the Virtual Observatory		
Unidad de Archivo de Datos	2014-04-02	Page 1 of 20

UNIDAD DE ARCHIVO DE DATOS

Centro de Astrobiología

INTA-CSIC

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3. Support to Spanish Data Centers

Some implementations:

IACOB, an spectroscopic database using MySpec

Spex, in process using MySpec

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3.Support to Spanish Data Centers

9 Conesearch using SVOCat,
6 of them have implemented
a MOC service

Shapley Supercluster Survey ShaSS Public Data Catalogue

Shapley Supercluster Survey
ShaSS Public Data Catalogue

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Shapley Supercluster Survey: ShaSS Public Data Catalogue

The Shapley Supercluster Survey (ShaSS, z~0.05) covers a contiguous area of 260 h^-2_70 Mpc^2 including the supercluster core. The project main aim is to quantify the influence of cluster-scale mass assembly on galaxy evolution in one of the most massive structures in the local Universe. The survey includes nine Abell clusters (A3552, A3554, A3556, A3558, A3559, A3560, A3562, AS0724, AS0726) and two poor clusters (SC1327-312, SC1329-313) showing evidence of cluster-cluster interactions. Optical (ugri) and near-infrared (K) imaging acquired with VST and VISTA allow us to study the galaxy population down to m*+6 at the supercluster redshift. A dedicated spectroscopic survey with AAOmega on the Anglo-Australian Telescope provides a magnitude-limited sample of supercluster members with 80% completeness at ~m*+3.
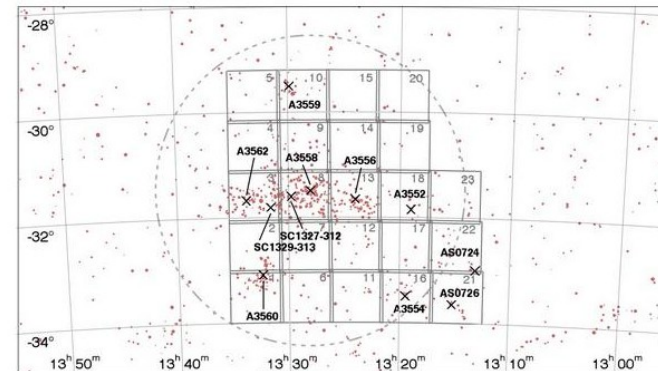

Fig. 1 - The 23 1 sqdeg VST fields mapping the ShaSS region. Red dots indicate the supercluster members in the range V_h=11300-17000 km/s taken from literature. The size of the dots are proportional to the K-band flux. Black crosses show the cluster centres. The 10 Mpc radius dotted circle encloses the supercluster region believed to be dynamically bound. The Shapley supercluster core corresponds to fields #3,8,13. The positions of all structures present in the plotted area in the given redshift range are indicated.

Resources
- Data retrieval
- News
- Documentation
- Help-Desk

2015MNRAS.453.3685M