

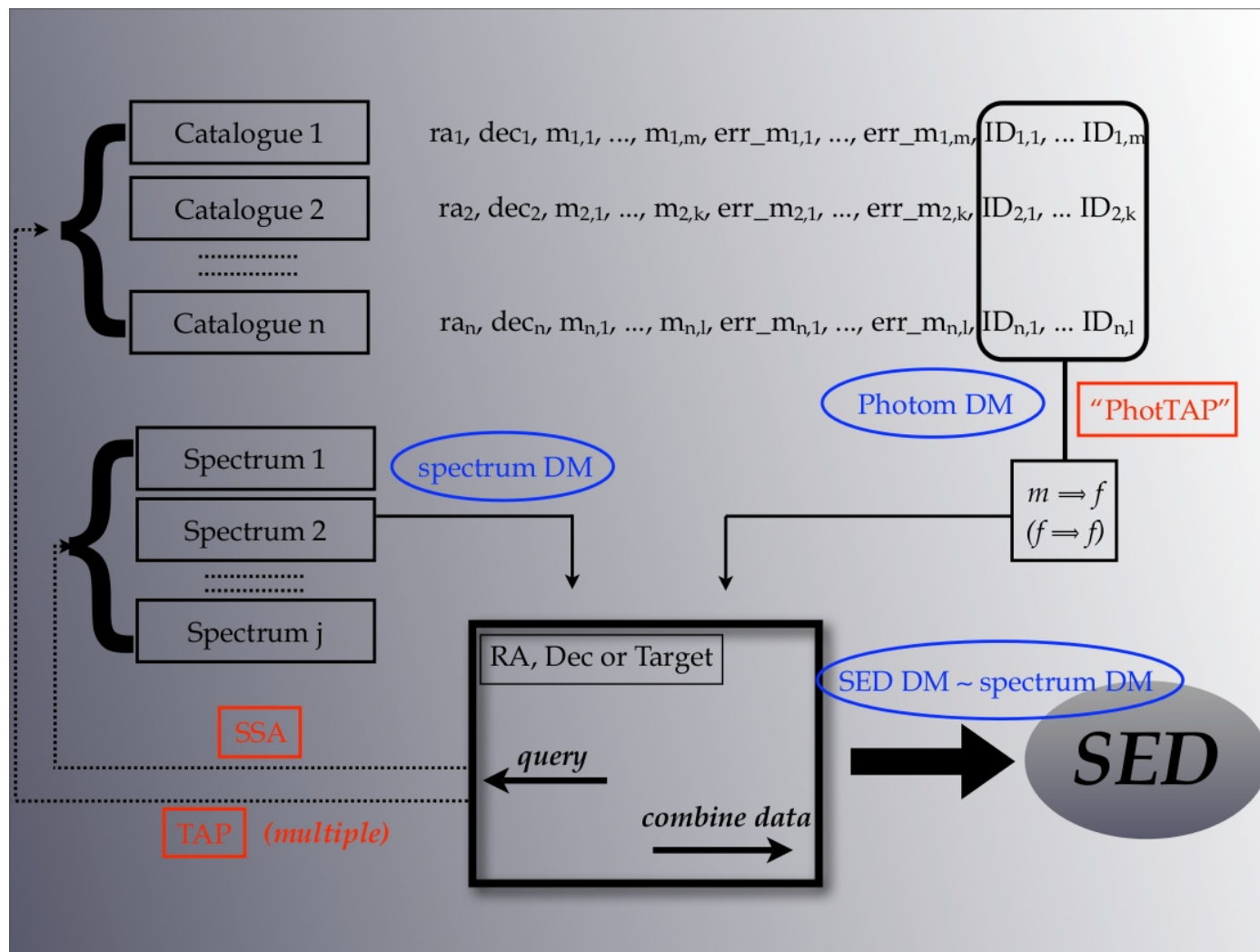


VOSED: a VO tool to build and analyze SEDs

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IVOA Interoperability Meeting.
Nara, 7-11 December 2010

Following Paolo's talk...



Evanthia's wish list at EURO-VO Tech Forum:

- VOTable with different segments
- “Build a SED of my favorite object from this and that data set (spectra and catalogues)
- Give me back the SED of all objects in a given region of the sky combining all the available data sets.

Input form



1. Enter target

Object: Submit Query Reset

Examples: HD 142600, V1026 Sco, 18:27:45.79 +34:36:18.77

Search radius: (decimal degrees)

Redshift:

Data Services:

[Spectroscopic Data](#)

Mark all

<input checked="" type="checkbox"/>	AXIS-XMS Optical Spectra	http://venus.ifca.unican.es:8080/SSAPXMS?
<input checked="" type="checkbox"/>	Be Star Spectra SSAP	http://basebe.obspm.fr/cgi-bin/ssapBE_1.0.pl?
<input checked="" type="checkbox"/>	Be Stars Spectra database	http://basebe.obspm.fr/cgi-bin/ssapBE01.pl?
<input checked="" type="checkbox"/>	CENCOS-VVDS_DEEP SSA (VVDS Deep survey)	http://lanwws.oamp.fr/DAL/SSA/CENCOS-vvds_d
<input checked="" type="checkbox"/>	ELODIE archive (Service not working)	http://atlas.obs-hp.fr/elodie/E.cgi?a=t&
<input checked="" type="checkbox"/>	ESO Spectrum Service	http://archive.eso.org/apps/ssaserver/EsoProxyS
<input checked="" type="checkbox"/>	Epic Spectra SSAP of the SSC Interface for the 2XMMi Catalogue	http://xcatdb.u-strasbg.fr/2xmmi/ssa?collection
<input checked="" type="checkbox"/>	Epic Spectra SSAP of the SSC Interface for the 2XMMi DR3 Catalogue	http://xcatdb.u-strasbg.fr/2xmmidr3/ssa?collect
<input checked="" type="checkbox"/>	Espadons/Narval legacy database (Castor)	http://magics.bagn.obs-mip.fr/cgi-bin/get_resou
<input checked="" type="checkbox"/>	Extreme Ultraviolet Explorer Merged Spectra	http://archive.stsci.edu/ssap/search2.php?id=EL
<input checked="" type="checkbox"/>	Far Ultraviolet Spectroscopic Explorer	http://archive.stsci.edu/ssap/search2.php?id=FL
<input checked="" type="checkbox"/>	Far Ultraviolet Spectroscopic Explorer (Simple Spectrum Data Access)	http://vo.obspm.fr/cgi-bin/siap/ssapFUSE.pl?

Input form



1. Enter target
2. Redshift as input parameter (for extragalactic objects)

Object: [Reset](#)

Examples: HD 142666, V* V1026 Sco, 18:27:45.79 +34:36:18.77

Search radius: (decimal degrees)

Redshift:

Data Services:

[Spectroscopic Data](#)

Mark all

<input checked="" type="checkbox"/>	AXIS-XMS Optical Spectra	http://venus.ifca.unican.es:8080/SSAPXMS?
<input checked="" type="checkbox"/>	Be Star Spectra SSAP	http://basebe.obspm.fr/cgi-bin/ssapBE_1.0.pl?
<input checked="" type="checkbox"/>	Be Stars Spectra database	http://basebe.obspm.fr/cgi-bin/ssapBE01.pl?
<input checked="" type="checkbox"/>	CENCOS-VVDS_DEEP SSA (VVDS Deep survey)	http://lamwvs.oamp.fr/DAL/SSA/CENCOS-vvds_d
<input checked="" type="checkbox"/>	ELODIE archive (Service not working)	http://atlas.obs-hp.fr/elodie/E.cgi?a=t&
<input checked="" type="checkbox"/>	ESO Spectrum Service	http://archive.eso.org/apps/ssaserver/EsoProxy&
<input checked="" type="checkbox"/>	Epic Spectra SSAP of the SSC Interface for the 2XMMi Catalogue	http://xcatdb.u-strasbg.fr/2xmmi/ssa?collection
<input checked="" type="checkbox"/>	Epic Spectra SSAP of the SSC Interface for the 2XMMi DR3 Catalogue	http://xcatdb.u-strasbg.fr/2xmmidr3/ssa?collect
<input checked="" type="checkbox"/>	Espadons/Narval legacy database (Castor)	http://magics.bagn.obs-mip.fr/cgi-bin/get_resou
<input checked="" type="checkbox"/>	Extreme Ultraviolet Explorer Merged Spectra	http://archive.stsci.edu/ssap/search2.php?id=EL
<input checked="" type="checkbox"/>	Far Ultraviolet Spectroscopic Explorer	http://archive.stsci.edu/ssap/search2.php?id=FL
<input checked="" type="checkbox"/>	Far Ultraviolet Spectroscopic Explorer (Simple Spectrum Data Access)	http://vo.obspm.fr/cgi-bin/siap/ssapFUSE.pl?

Input form



1. Enter target
2. Redshift as input parameter.
3. Select SSAP services

Services are discovered using the VO registry
Services not working are ignored.

Object: [Reset](#)
Examples: HD 142666, V* V1026 Sco, 18:27:45.79 +34:36:18.77

Search radius: (decimal degrees)

Redshift:

Data Services:
[Spectroscopic Data](#)

Mark all

<input checked="" type="checkbox"/>	AXIS-XMS Optical Spectra	http://venus.ifca.unican.es:8080/SSAPXMS?
<input checked="" type="checkbox"/>	Be Star Spectra SSAP	http://basebe.obspm.fr/cgi-bin/ssapBE_1.0.pl?
<input checked="" type="checkbox"/>	Be Stars Spectra database	http://basebe.obspm.fr/cgi-bin/ssapBE01.pl?
<input checked="" type="checkbox"/>	CENCOS-VVDS_DEEP SSA (VVDS Deep survey)	http://lamwvs.oamp.fr/DAL/SSA/CENCOS-vvds_d
<input checked="" type="checkbox"/>	ELODIE archive (Service not working)	http://atlas.obs-hp.fr/elodie/E.cgi?a=t&
<input checked="" type="checkbox"/>	ESO Spectrum Service	http://archive.eso.org/apps/ssaserver/EsoProxy&
<input checked="" type="checkbox"/>	Epic Spectra SSAP of the SSC Interface for the 2XMMI Catalogue	http://xcatdb.u-strasbg.fr/2xmmi/ssa?collection
<input checked="" type="checkbox"/>	Epic Spectra SSAP of the SSC Interface for the 2XMMI DR3 Catalogue	http://xcatdb.u-strasbg.fr/2xmmidr3/ssa?collect
<input checked="" type="checkbox"/>	Espadons/Narval legacy database (Castor)	http://magics.bagn.obs-mip.fr/cgi-bin/get_resou
<input checked="" type="checkbox"/>	Extreme Ultraviolet Explorer Merged Spectra	http://archive.stsci.edu/ssap/search2.php?id=EL
<input checked="" type="checkbox"/>	Far Ultraviolet Spectroscopic Explorer	http://archive.stsci.edu/ssap/search2.php?id=FL
<input checked="" type="checkbox"/>	Far Ultraviolet Spectroscopic Explorer (Simple Spectrum Data Access)	http://vo.obspm.fr/cgi-bin/siap/ssapFUSE.pl?

Input form



1. Enter target
2. Redshift as input parameter.
3. Select SSAP services
 - Most demanded
 - Accurate calibration
 - Wide range of the spectrum
4. Select photometric services

(a standard photometry access would be very useful)

Service	URL
<input checked="" type="checkbox"/> ST-ECF Hubble Legacy Archive High-Level Spectra	http://www...
<input checked="" type="checkbox"/> ST-ECF Hubble Space Telescope Spectra	http://www...
<input checked="" type="checkbox"/> Spectrum interpolator for the ELODIE library	http://leda...
<input type="checkbox"/> TBL Narval legacy (Service not working)	http://tbl...
<input checked="" type="checkbox"/> The ISO Data Archive InterOperability System	http://archi...
<input checked="" type="checkbox"/> Tubingen Echelle Spectra	http://archi...
<input checked="" type="checkbox"/> Ultraviolet photometry for IUE highly processed spectra	http://svo.c...
<input checked="" type="checkbox"/> VVDS-F02 DEEP spectra	http://obeli...
<input checked="" type="checkbox"/> Wisconsin Halfwave Spectropolarimeter	http://archi...
<input checked="" type="checkbox"/> Wisconsin Ultraviolet Photo-Polarimeter Experiment	http://archi...
<input checked="" type="checkbox"/> cutout server of HEROS archive of Ondrejov observations	http://stelv...

Photometric Data
Mark all

2XMMi	<input checked="" type="checkbox"/>
Stromgren	<input checked="" type="checkbox"/>
2MASS (PSC)	<input checked="" type="checkbox"/>
SDSS (DR7)	<input checked="" type="checkbox"/>
Tycho2	<input checked="" type="checkbox"/>
IRAS PSC	<input checked="" type="checkbox"/>
IRAS FSC	<input checked="" type="checkbox"/>
FIRST	<input checked="" type="checkbox"/>
WENSS	<input checked="" type="checkbox"/>

User's Data:

Input form



1. Enter target
2. Redshift as input parameter.
3. Select SSAP services
4. Select photometric services
5. User's data may be loaded

The screenshot shows the LAEFF VOSED search form in a Mozilla browser. The search form is titled "LAEFF VOSED - Search form" and contains a list of services with checkboxes. The "User's Data" section is circled in red, and a red arrow points from the "Load Local Data" button to the "Upload file" window.

Photometric Data

Service	Selected
2XMMi	<input checked="" type="checkbox"/>
Stromgren	<input checked="" type="checkbox"/>
2MASS (PSC)	<input checked="" type="checkbox"/>
SDSS (DR7)	<input checked="" type="checkbox"/>
Tycho2	<input checked="" type="checkbox"/>
IRAS PSC	<input checked="" type="checkbox"/>
IRAS FSC	<input checked="" type="checkbox"/>
FIRST	<input checked="" type="checkbox"/>
WENSS	<input checked="" type="checkbox"/>

User's Data:

LAEFF VOSED - Upload file - Mozilla

File Description: My Data

File Type: VOTable

Wave Column Name: WAVE

Wave Unit: m

Wave Dimeq: L

Wave Scaleq: 1.0

Flux Column Name: FLUX

Flux Unit: W/m2/m

Flux Dimeq: ML-1T-3

Results



The results include:

1. Basic object info
2. Equivalent names
3. Service results summary.
4. Computed stellar physical parameters (only if 2MASS and/or Strömrgren photometry is available)

LAEFF VOSED - Search Results - Mozilla Firefox

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http://sdc.laeff.inta.es/vosed/Pasarela

SVO LAEFF VOSED - Search Results

SED Builder & Fitting Tool: Results

Resolved Object		Equivalent Names			
Search Name	hd 141569	HD 141569	BD-03 3833	CCDM J15500-0355A	CSI-03 3833 1
SIMBAD Name	hd 141569	EM* CDS 887	GC 21274	GSC 05026-00042	HD 141569A
Type	pr*	HIC 77542	HIP 77542	IDS 15447-0337 A	IRAS 15473-0346
RA	237.49062	2MASS J15495775-0355162	PDS 398	PPM 198989	SAO 140789
DEC	-3.92121	SKY# 28618	TD1 18598	TYC 5026-42-1	uvby98 100141569 ABC
		YZ 93 5502	[DML87] 382		

Products found matching your criteria		Stellar Physical Parameters			
POS = 237.49062 , -3.921211 SIZE = 0.001389		Calculated		Adopted	
		Value	Error	Value	Error
INES: The IUE Newly Extracted Spectra	9	T _{eff} (IR)	8227 131	10206	
Infrared Space Observatory Simple Spectrum Data Access	3	T _{eff} (Strömrgren)	10206		
ESO Science Archive Spectrum Service	3	log g	4.07	4.070000	
Far Ultraviolet Spectroscopic Explorer	1	M/H			
Stromgren photometry	1	E(B-V)	0.0 0.0	0.0	0.0
2MASS (PSC) photometry	1	Flags	021122		
Tycho2 photometry	1	Strömrgren Dist. (pc)	168.2		
IRAS PSC photometry	1	Chi ²	0.059		

Mark all

Display SED Retrieve Marked Data Compute Theoretical Model

Terminado

Results



The results include:

1. Basic object info
2. Equivalent names
3. Service results summary.
4. Computed stellar physical parameters
5. VO resources details.

ESO Spectrum Service ^

SSAP query: <http://archive.eso.org/apps/ssaserver/EsoProxySsap?POS=239.16676292,-22.02778139&SIZE=0.001>

Mark	Error	AcRef	Format	Ra	Dec	NGAS_ID	
<input type="checkbox"/>	Not supported units for Flux: arbitrary. Data not included in the SED.	File	application/fits	239.16675	-22.0277777778	ADP.HARPS.2006-04-03T06:45:27.601_2_S1D_A	HAF

INES: The IUE Newly Extracted Spectra ^

SSAP query: <http://sdc.cab.inta-csic.es/ines/jsp/ssap.jsp?POS=239.16676292,-22.02778139&SIZE=0.0013888898>

Mark	Title	Image	Dispersion	Aperture	Object	RA	DEC
<input checked="" type="checkbox"/>	IUE/INES Spectrum: LWP13800LL, Target: HD 142666	13800	LOW	LARGE	HD 142666	239.1669	-22.0275
<input type="checkbox"/>	IUE/INES Spectrum: LWP30392RL, Target: HD 142666	30392	HIGH	LARGE	HD 142666	239.1669	-22.0278
<input type="checkbox"/>	IUE/INES Spectrum: LWP30392HL, Target: HD 142666	30392	HIGH	LARGE	HD 142666	239.1669	-22.0278
<input type="checkbox"/>	IUE/INES Spectrum: LWP30405LL, Target: HD 142666	30405	LOW	LARGE	HD 142666	239.1669	-22.0278
<input type="checkbox"/>	IUE/INES Spectrum: LWP31402RL, Target: HD 142666	31402	HIGH	LARGE	HD 142666	239.1669	-22.0275
<input type="checkbox"/>	IUE/INES Spectrum: LWP31402HL, Target: HD 142666	31402	HIGH	LARGE	HD 142666	239.1669	-22.0275
<input checked="" type="checkbox"/>	IUE/INES Spectrum: SWP34000LL, Target: HD 142666	34000	LOW	LARGE	HD 142666	239.1669	-22.0275
<input type="checkbox"/>	IUE/INES Spectrum: SWP34054LL, Target: HD 142666	34054	LOW	LARGE	HD 142666	239.1669	-22.0275
<input type="checkbox"/>	IUE/INES Spectrum: SWP54310LL, Target: HD 142666	54310	LOW	LARGE	HD 142666	239.1669	-22.0278

The ISO Data Archive InterOperability System ^

SSAP query: <http://archives.esac.esa.int/ida/aio/jsp/siap.jsp?imageType=spectrum&POS=239.16676292,-22.0277>

Mark							
<input checked="" type="checkbox"/>	44901283	File	ISO SWS01 Spectrum Target: HD142666	1997-02-07 19:12:46.491	1997-02-07 21:01:44.491	239.1669	
<input checked="" type="checkbox"/>	45400311	File	ISO LWS01 Spectrum Target: HD 142666	1997-02-12 10:10:13.491	1997-02-12 10:46:59.491	239.1670	
<input type="checkbox"/>	10402952	File	ISO SWS01 Spectrum Target: HD142666	1996-02-29 18:23:12.491	1996-02-29 19:20:54.491	239.16705000	
<input type="checkbox"/>	10402846	File	ISO PHT22 Spectrum Target: HD142666	1996-02-29 17:45:50.491	1996-02-29 17:58:24.491	239.1671	
<input type="checkbox"/>	10402847	File	ISO PHT40 Spectrum Target: HD142666	1996-02-29 17:59:06.491	1996-02-29 18:01:26.491	239.1671	

Terminado

Results



The results include:

1. Basic object info
2. Equivalent names
3. Service results summary.
4. Computed stellar physical parameters
5. VO resources details.
6. Found photometry.

LAEFF VOSED - Search Results - Mozilla Firefox

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http://sdc.cab.inta-csic.es/vosed/Pasarela

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SVO LAEFF VOSED - Search Results

SSAP query: <http://archives.esac.esa.int/ida/aio/jsp/siap.jsp?imageType=spectrum&POS=239.16676292,-22.02778139&>

Mark											
<input checked="" type="checkbox"/>	44901283	File	ISO SWS01 Spectrum Target: HD142666	1997-02-07 19:12:46.491	1997-02-07 21:01:44.491	239.16699					
<input checked="" type="checkbox"/>	45400311	File	ISO LWS01 Spectrum Target: HD 142666	1997-02-12 10:10:13.491	1997-02-12 10:46:59.491	239.167005					
<input type="checkbox"/>	10402952	File	ISO SWS01 Spectrum Target: HD142666	1996-02-29 18:23:12.491	1996-02-29 19:20:54.491	239.16705000000002					
<input type="checkbox"/>	10402846	File	ISO PHT22 Spectrum Target: HD142666	1996-02-29 17:45:50.491	1996-02-29 17:58:24.491	239.16717					
<input type="checkbox"/>	10402847	File	ISO PHT40 Spectrum Target: HD142666	1996-02-29 17:59:06.491	1996-02-29 18:01:26.491	239.16717					

2MASS (PSC) ^

Mark	distance (arcmin)	_RAJ2000	_DEJ2000	_r	Jmag	e_Jmag	Qflg	Hmag	e_Hmag	Kmag	e_Km
<input checked="" type="checkbox"/>	0.00039	239.166756	-22.027782	0.000006	7.351	0.026	AAA	6.739	0.027	6.077	0.01

Tycho2 ^

Mark	distance (arcmin)	_RAJ2000	_DEJ2000	_r	BTmag	e_BTmag	VTmag	e_VTmag	TYC1	TYC2
<input checked="" type="checkbox"/>	0.00041	239.166756	-22.027779	0.000059	9.480	0.020	8.884	0.016	6199	618

IRAS PSC ^

Mark	distance (arcmin)	_RAJ2000	_DEJ2000	_r	Fnu_12	e_Fnu_12	q_Fnu_12	Fnu_25	e_Fnu_25	q_Fr
<input checked="" type="checkbox"/>	0.07108	239.1655	-22.0276	0.00120	8.57e+00	4	3	1.12e+01	6	

IRAS FSC ^

Mark	distance (arcmin)	_RAJ2000	_DEJ2000	_r	Fnu12	e_Fnu12	q_Fnu12	Fnu25	e_Fnu25	q_Fnu25
<input checked="" type="checkbox"/>	0.01143	239.1667	-22.0276	0.00022	8.67e+00	4	3	1.15e+01	5	3

Display SED Retrieve Marked Data

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Results



The data may be:

1. Open with VOSpec

The screenshot displays the VOSpec software interface within a Mozilla Firefox browser window. The browser address bar shows the URL <http://sdc.laeff.inta.es/vosed/Pasarela>. The VOSpec application window features a menu bar (File, Edit, View, Operations, Plastic, SAMP, Help) and a toolbar with various icons. The main interface is divided into several sections:

- Resolved Object:** A table with the following data:

Search Name	hd 1411
SIMBAD Name	hd 1411
Type	
RA	237.490
DEC	-3.921
- Products found:** A list of data sources including POS = 237.49062, INES, ESO Science Archive Spectroscopy, Far Ultraviolet Spectroscopic Explorer, Stromgren photometry, 2MASS (PSC) photometry, Tycho2 photometry, and IRAS PSC photometry.
- Wave Unit:** Set to micron.
- Flux Unit:** Set to Jy.
- RedShift:** 0.00.
- De-reddening:** λV 0.00.
- Graphic Mode:** A list of data sources with checkboxes and dropdown menus for visualization (Points, Lines, etc.).
- Target:** A search box with fields for RA (0), Dec (0), and Size (0), and a Query button.
- Plot:** A spectral analysis plot titled "VOSpec Spectral Analysis Tool" showing Flux (Jy, logarithmic) on the y-axis (ranging from 1e-04 to 1e+02) versus Wavelength (micron, logarithmic) on the x-axis (ranging from 5.0 to 1e+02). The plot displays a spectrum with various data points and a fitted curve.
- Legend:** A list of checked items: ISO SW501 Spectrum Target: HD142666, ISO LWS01 Spectrum Target: HD 142666, 2MASS (PSC), Tycho2, and IRAS PSC.
- Buttons:** I finished, RETRIEVE, Unmark All, and Reset.

At the bottom of the browser window, two buttons are circled in red: "Display SED" and "Retrieve Marked Data".

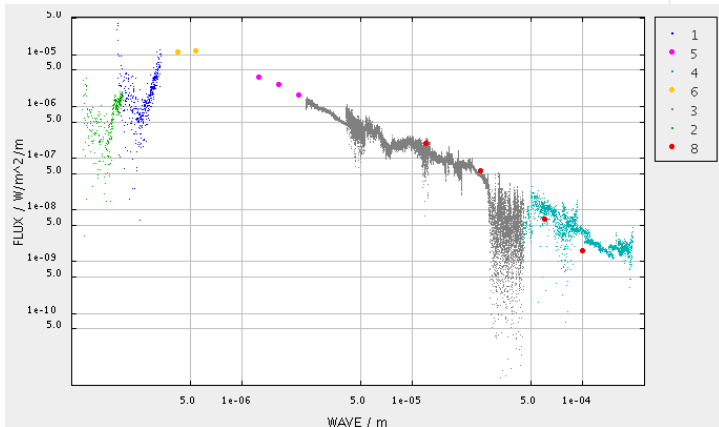
Results



The data may be:

1. Open in VOSpec
2. Downloaded
 - The origin of each point of the SED is identified.

Info to add: aperture, bandpass, observing date



```
<VOTABLE version="1.1" xmlns="http://www.ivoa.net/xml/VOTable/v1.1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.ivoa.net/xml/VOTable/v1.1 http://www.ivoa.net/xml/VOTable/v1.1"
xmlns:sed="http://www.ivoa.net/xml/SedModel/v1.0"> <DESCRIPTION>Spanish Virtual Observatory</DESCRIPTION>
<RESOURCE>
  <TABLE>
    <GROUP name="1">
      <PARAM name="SourceServiceName" value="INES: The IUE Newly Extracted Spectra" datatype="char"
arraysize="*" />
      <PARAM name="SourceTitle" value="IUE/INES Spectrum: LWP13800LL, Target: HD 142666" datatype="char"
arraysize="*" />
      <PARAM name="SourceDataLink"
value="http://sdc.cab.inta-csic.es:80/cgi-ines/SingleDownload?filename=LWP13800LL.FITS" datatype="char"
arraysize="*" />
      <PARAM name="SourceId" value="1" datatype="int" />
    </GROUP>
    <GROUP name="2">
      <PARAM name="SourceServiceName" value="2MASS (PSC)" datatype="char" arraysize="*" />
      <PARAM name="SourceTitle" value="2MASS (PSC)" datatype="char" arraysize="*" />
      <PARAM name="SourceDataLink"
value="http://vizier.u-strasbg.fr/viz-bin/votable/-A?-source=II/246/&-out.add=_RAJ2000,_DEJ2000&-out
t.max=99&-order=I&-c.eq=J2000&-oc.form=dec&-c.u=deg&-c.geom=r&-out.add=_r&-sort
=_r&-out=Jmag&-out=e_Jmag&-out=Qflg&-out=Hmag&-out=e_Hmag&-out=Qflg&-out=Kmag&
mp;-out=e_Kmag&-out=Qflg&RA=239.16676292&DEC=-22.02778139&SR=0.001388889" datatype="char"
arraysize="*" />
      <PARAM name="SourceId" value="2" datatype="int" />
    </GROUP>
    <FIELD unit="m" datatype="float" name="WAVE0" />
    <FIELD unit="m" datatype="float" name="WAVE" />
    <FIELD unit="W/m^2/m" datatype="float" name="FLUX" />
    <FIELD unit="W/m^2/m" datatype="float" name="E_FLUX" />
    <FIELD unit="" datatype="char" arraysize="*" name="O_FLAG" />
    <FIELD unit="" datatype="int" name="SOURCE" />
    <DATA>
      <TABLEDATA>
        <TR>
          <TD>1.8514329833984375E-7</TD><TD>1.8514329833984375E-7</TD><TD>1.9915280091275384E-6</TD><TD>4.706
218596252365E-6</TD><TD></TD><TD>1</TD>
        </TR>
        <TR>
          <TD>1.854102294921875E-7</TD><TD>1.854102294921875E-7</TD><TD>7.316962790868131E-6</TD><TD>4.540319
1297789525E-6</TD><TD></TD><TD>1</TD>
        </TR>
      </TABLEDATA>
    </DATA>
  </RESOURCE>
</VOTABLE>
```

Multiple object mode




LAEFF VOSED - Homepage - Mozilla Firefox




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 **VOSED**
SED Builder & Fitting Tool

Funded by   

SED Builder & Fitting Tool

Resources

- ▶ [Single object search](#)
- ▶ [Multiple object search](#)
- ▶ [User Guide](#)
- ▶ [Help Desk](#)

*VOSED has been developed in the framework of the Spanish Virtual Observatory project (AYA 2008-02156).
The system is maintained by the Data Archive Unit of the CAB (INTA-CSIC).
If you use VOSED in your research, please include the following acknowledgement in any resulting publications:
"Based on data from the VOSED tool at CAB".*

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Multiple object



A multiple object query may be performed:

- Typing the object names or coordinates
- Loading a text file where you can specify:
 - Object names or coordinates
 - Redshift of each of them.

LAEFF VOSED - Search form - Mozilla Firefox

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http://sdc.laeff.inta.es/vosed/jsp/form_search.jsp?searchType=...

SVO LAEFF VOSED - Search form

VOSED
SED Builder & Fitting Tool

Funded by

SED Builder & Fitting Tool: Search Form

Object List: [Reset](#)

Obj. List File:

Search radius: (decimal degrees)

Data Services:

[Spectroscopic Data](#)

Mark all

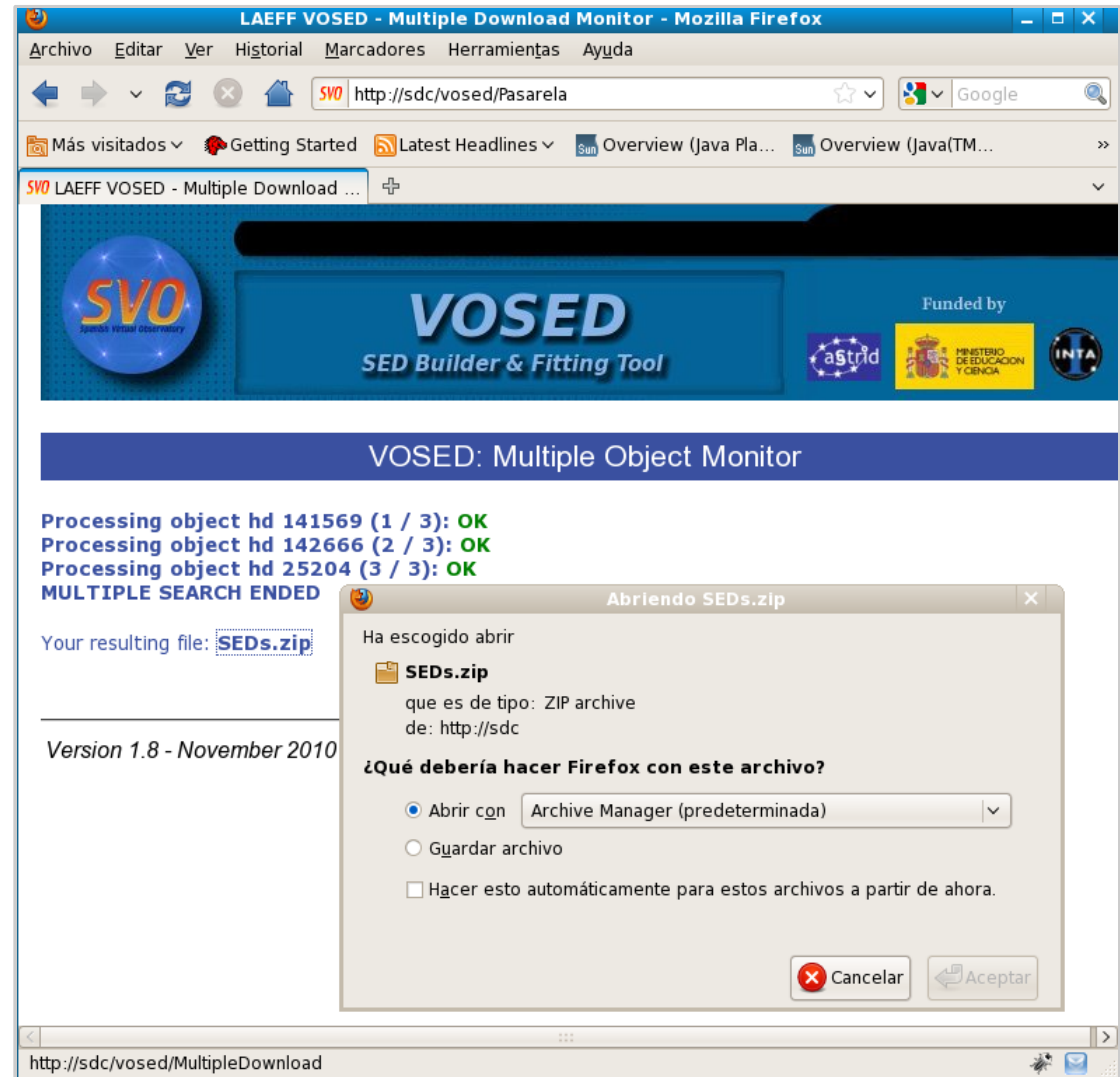
<input checked="" type="checkbox"/>	Hubble Space Telescope Faint Object Spectrograph	http://archive.eso.org/bin/fos_ssap.pl?
<input checked="" type="checkbox"/>	Hubble Space Telescope Spectra	http://archive.stsci.edu/ssap/search.php?id=HST&
<input checked="" type="checkbox"/>	Hopkins Ultraviolet Telescope	http://archive.stsci.edu/ssap/search.php?id=HUT&
<input checked="" type="checkbox"/>	Wisconsin Ultraviolet Photo-Polarimeter Experiment	http://archive.stsci.edu/ssap/search.php?id=WUPPE&
<input checked="" type="checkbox"/>	Extreme Ultraviolet Explorer Merged Spectra	http://archive.stsci.edu/ssap/search.php?id=EUVE&
<input checked="" type="checkbox"/>	Wisconsin Halfwave Spectropolarimeter	http://archive.stsci.edu/ssap/search.php?id=HPOL&
<input checked="" type="checkbox"/>	HyperLeda FITS Archive Simple Spectrum Data Access(HFA SSA)	http://leda.univ-lyon1.fr/G.cgi?c=ssa&n=fassa&
<input checked="" type="checkbox"/>	ELODIE archive	http://atlas.obs-hp.fr/elodie/E.cgi?a=t&c=ssa&n=ssa&

Multiple object



The process is monitored in real time.

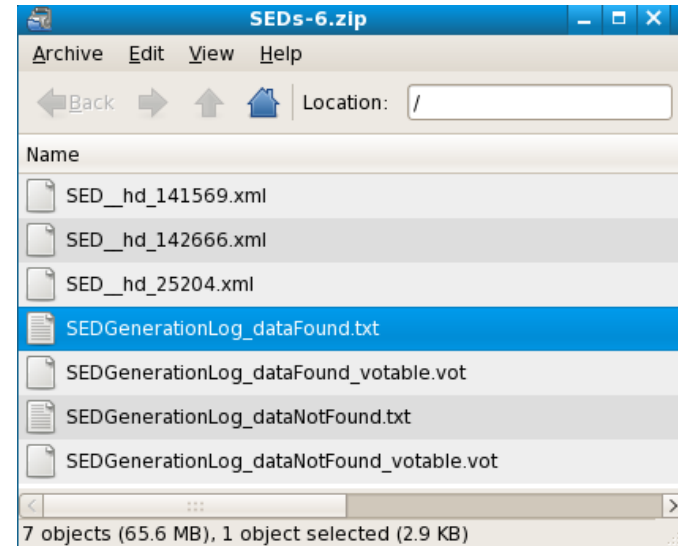
A ZIP file is generated containing the SEDs.



Multiple object



Generation logs are also provided in ASCII and VOTable formats.



Object	Redshift	Serv. Type	Data Found	Instrument	Wav. range (m)	Serv. name	Error
hd 141569		SSAP	0 OK, 1 failed	UVES	n/a	ESO Spectrum Service	Warning: Spectral and Flux axes not identified
hd 141569		SSAP	9 OK, 0 failed	LWP, SWP	115.05811E-9 - 334.99749E-9	INES: The IUE Newly Extracted Spectra	
hd 141569		SSAP	3 OK, 0 failed		2.381422E-6 - 196.8293E-6	The ISO Data Archive <u>InterOperability System</u>	
hd 141569		PHOT	1 OK, 0 failed		345.056E-9 - 547.803E-9	<u>Stromgren</u>	
hd 141569		PHOT	1 OK, 0 failed		1.2518E-6 - 2.1539E-6	2MASS (PSC)	
hd 141569		PHOT	1 OK, 0 failed		420.44E-9 - 532.185E-9	Tycho2	
hd 141569		PHOT	1 OK, 0 failed		12E-6 - 100E-6	IRAS PSC	
hd 142666		SSAP	0 OK, 1 failed		n/a	ESO Spectrum Service	Not supported units for Flux: arbitrary
hd 142666		SSAP	9 OK, 0 failed	LWP, SWP	115.05811E-9 - 334.99917E-9	INES: The IUE Newly Extracted Spectra	
hd 142666		SSAP	5 OK, 0 failed		2.3803439E-6 - 200E-6	The ISO Data Archive <u>InterOperability System</u>	
hd 142666		PHOT	1 OK, 0 failed		1.2518E-6 - 2.1539E-6	2MASS (PSC)	
hd 142666		PHOT	1 OK, 0 failed		420.44E-9 - 532.185E-9	Tycho2	
hd 142666		PHOT	1 OK, 0 failed		12E-6 - 100E-6	IRAS PSC	
hd 142666		PHOT	1 OK, 0 failed		12E-6 - 100E-6	IRAS FSC	
hd 25204		SSAP	22 OK, 0 failed	LWR, SWP	115.00778E-9 - 335.0113E-9	INES: The IUE Newly Extracted Spectra	
hd 25204		PHOT	1 OK, 0 failed		1.2518E-6 - 2.1539E-6	2MASS (PSC)	
hd 25204		PHOT	1 OK, 0 failed		420.44E-9 - 532.185E-9	Tycho2	
hd 25204		PHOT	1 OK, 0 failed		12E-6 - 100E-6	IRAS PSC	

Successfully used in two Euro-VO Research Initiative projects:

- A common scale for the spectroscopic metallicity determination of field and open cluster stars (P.I. U. Heiter):
 - SED's building of approx. 5300 objects
- Spectral Energy Distribution of 2XMM-selected AGNs (P.I. R. Gil-Merino)
 - Approx. 3000 objects.

Problems found



Table Browser for 1: SEDGenerationLog_dataFound_votable.vot

	Object	Data Found	Serv. name	Error	Query URL
22	hd 25204	Service error	Espadons/Narval legacy database (Castor)	Error parsing VOTable.	http://magics.bagn.obs-mip.fr/cgi-bin/get_resources?...
23	hd 25204	Service error	GIRAFFE archive of reduced spectra	UNKNOWN ERROR	UNKNOWN
24	hd 25204	Service error	High Energy Stereoscopic System	SQLSTATE[08006] [7] FATAL: no pg_hba.conf ent...	http://voparis-srv.obspm.fr/srv/ssa-hess_spectrum.p...
25	hd 25204	22 OK, 0 failed	INES: The IUE Newly Extracted Spectra		http://sdc.cab.inta-csic.es/ines/jsp/ssap.jsp?POS=60...
1	hd 142666	0 OK, 1 failed	ESO Spectrum Service	Not supported units for Flux: arbitrary	http://archive.eso.org/apps/ssaserver/EsoProxySsap?...
2	hd 142666	1 OK, 0 failed	Far Ultraviolet Spectroscopic Explorer		http://archive.stsci.edu/ssap/search2.php?id=FUSE&P...
3	hd 142666	0 OK, 1 failed	Far Ultraviolet Spectroscopic Explorer (Simple Spe...	Warning: Spectral and Flux axes not identified by ...	http://vo.obspm.fr/cgi-bin/siap/ssapFUSE.pl?POS=23...
4	hd 142666	Service error	GIRAFFE archive of reduced spectra	UNKNOWN ERROR	UNKNOWN
5	hd 142666	Service error	High Energy Stereoscopic System	SQLSTATE[08006] [7] FATAL: no pg_hba.conf ent...	http://voparis-srv.obspm.fr/srv/ssa-hess_spectrum.p...
6	hd 142666	9 OK, 0 failed	INES: The IUE Newly Extracted Spectra		http://sdc.cab.inta-csic.es/ines/jsp/ssap.jsp?POS=23...
7	hd 142666	5 OK, 0 failed	International Ultraviolet Explorer		http://archive.stsci.edu/ssap/search2.php?id=IUE&PO...
8	hd 142666	Service error	SSA Service for Optical Spectroscopy in the CDF-5	Invalid RA value: RA = 239.16676292.	http://www.g-vo.org/ssampe_102/SSA?archiveid=CDF...
9	hd 142666	Service error	SSA Service for zCOSMOS Bright Spectroscopic Ob...	Invalid RA value: RA = 239.16676292.	http://www.g-vo.org/ssampe_102/SSA?archiveid=ZCO...
10	hd 142666	5 OK, 0 failed	The ISO Data Archive InterOperability System		http://archives.esac.esa.int/ida/aio/jsp/siap.jsp?imag...
11	hd 141569	0 OK, 1 failed	ESO Spectrum Service	Warning: Spectral and Flux axes not identified by ...	http://archive.eso.org/apps/ssaserver/EsoProxySsap?...
12	hd 141569	1 OK, 0 failed	Far Ultraviolet Spectroscopic Explorer		http://archive.stsci.edu/ssap/search2.php?id=FUSE&P...
13	hd 141569	0 OK, 1 failed	Far Ultraviolet Spectroscopic Explorer (Simple Spe...	Warning: Spectral and Flux axes not identified by ...	http://vo.obspm.fr/cgi-bin/siap/ssapFUSE.pl?POS=23...
14	hd 141569	Service error	GIRAFFE archive of reduced spectra	UNKNOWN ERROR	UNKNOWN
15	hd 141569	Service error	High Energy Stereoscopic System	SQLSTATE[08006] [7] FATAL: no pg_hba.conf ent...	http://voparis-srv.obspm.fr/srv/ssa-hess_spectrum.p...
16	hd 141569	9 OK, 0 failed	INES: The IUE Newly Extracted Spectra		http://sdc.cab.inta-csic.es/ines/jsp/ssap.jsp?POS=23...
17	hd 141569	3 OK, 0 failed	International Ultraviolet Explorer		http://archive.stsci.edu/ssap/search2.php?id=IUE&PO...
18	hd 141569	Service error	SSA Service for Optical Spectroscopy in the CDF-5	Invalid RA value: RA = 237.49062042.	http://www.g-vo.org/ssampe_102/SSA?archiveid=CDF...
19	hd 141569	Service error	SSA Service for zCOSMOS Bright Spectroscopic Ob...	Invalid RA value: RA = 237.49062042.	http://www.g-vo.org/ssampe_102/SSA?archiveid=ZCO...
20	hd 141569	0 OK, 1 failed	ST-ECF Hubble Space Telescope Spectra	No units found for Wavelength.	http://www.stecf.org/hst-vo/hst_ssa?POS=237.49062...
21	hd 141569	3 OK, 0 failed	The ISO Data Archive InterOperability System		http://archives.esac.esa.int/ida/aio/jsp/siap.jsp?imag...

- Data services issues:

- Services down
- Services not complying standards.

Problems found



On Data Providers: Key Information (S/N, resolution, aperture) available in Native Data but missing in the VOTable

Telescopio Bernard Lyot
Narval archive

Query Query results Plotting Quicklook Statistics VO Tools User's guide

table by <shift>+click or /and <ctrl>+click.

	SNR(max)	SNR(550nm)	Hour Angle	Air Mass
20.195	373	348	-1.7300	1.54700
20.195	354	331	-1.5470	1.51200
20.195	360	336	-1.3630	1.48200
20.195	419	395	-1.1800	1.45600
20.195	749	702	-1.4550	1.49900
20.195	753	717	-1.4550	1.49900

14cet_narval_14sep08_int_Normal_I_001_NotNormalized_tbl.fits

214150

8.8868,-0.5056

FLUX

AWAV

nm

dimensionless

1E-9 L

1

spectrum/fits

Problems found



Table Parameters for 1: hpolret_15-mon_19910206_hw_vo.fits

Name	Value	Description
EXPOSURE	0.089	[sec] exposure duration
TSTART	48293.09	[date] MJD exposure_start time
TSTOP	48293.09000103	
TMID	48293.09000052	
SPECSDIM	10-10 L	
SPCOMID	5514.0	
SPCOBWID	4608.0	
FLUXSDIM	10+7 ML-1T-3	
SNR_MEAN	168.507	
FLUXAVG	6.76222E-11	
FLUXMAX	2.16200E-10	
SPCO_RES	25.0	
SPCODISP	5.992	

Table Parameters for 1: hpolret_15-mon_19910206_hw_vo.

Name	Value
REDSHIFT	unknown
TITLE	hpolret_15-mon_19910206_hw, 15-Mon
RA_TARG	100.2441666603
DEC_TARG	9.8955555556
SPCO_UCD	em.wl
FLUX_UCD	phot.fluxDens;em.wl
1S2_1	SPCO
1CYTP2	WAVE-TAB
1S3_1	SPCO
1CYTP3	WAVE-TAB
1S4_1	SPCO
1CYTP4	WAVE-TAB
APERTURE	12.0,12.

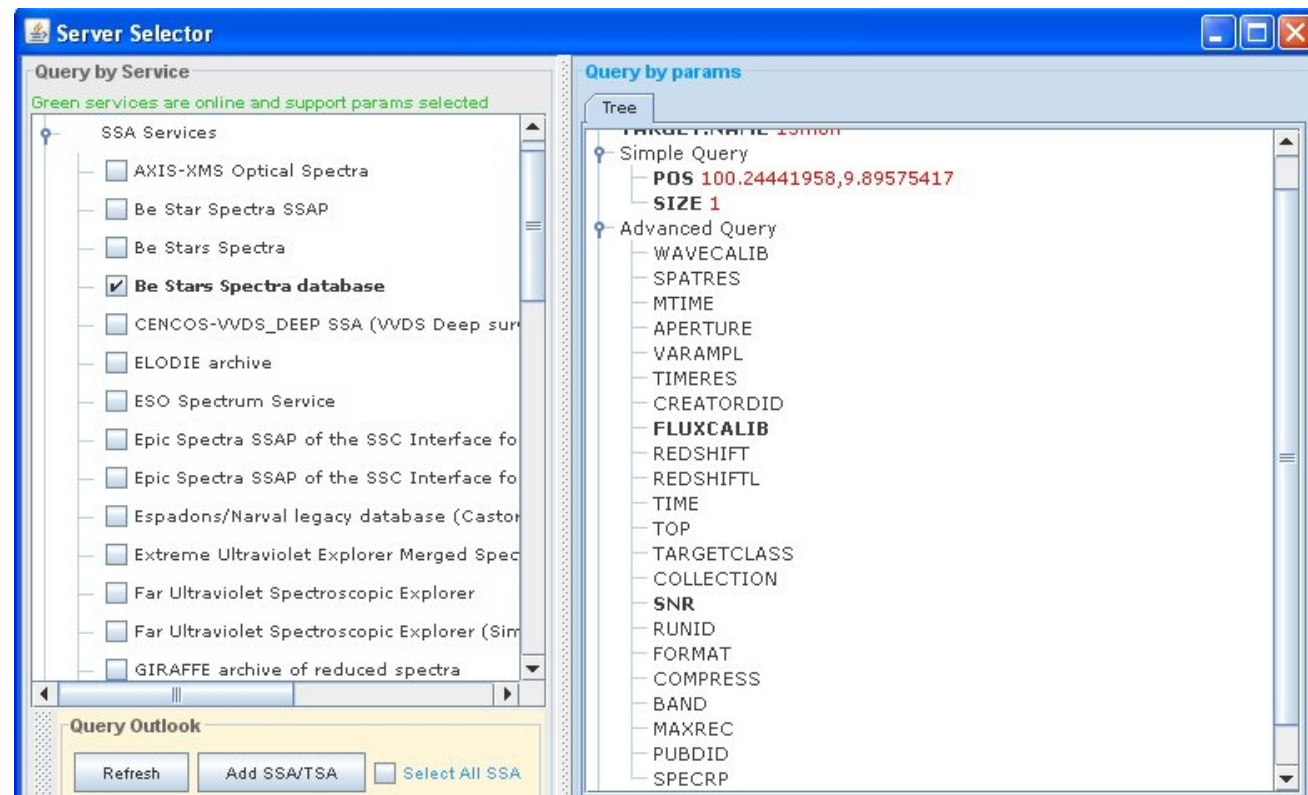
```

<TD>MAST.HPOL</TD>
<TD>100.24416666</TD>
<TD>9.89556</TD>
- <TD>
  http://archive.stsci.edu/pub/vospectra/hpol/hpolret_15-mon_19910206_hw_vo.fits
</TD>
<TD>15-Mon</TD>
<TD>764</TD>
<TD>48293.090</TD>
<TD>48293.090</TD>
<TD>1991-02-06 02:03:39</TD>
<TD/>
<TD>spectrum/fits</TD>
<TD>FK5</TD>
<TD>hpolret_15-mon_19910206_hw_vo.fits</TD>
<TD/>
<TD/>
<TD>n</TD>
<TD>n</TD>
<TD>3210.000</TD>
<TD>7818.000</TD>
<TD>SPCO FLUX Q U ERROR</TD>
<TD>L ML-1T-3 ML-1T-3</TD>
<TD>1E-10 1E+7 1E+7</TD>
<TD>ANGSTROM ERG/CM2/S/A PERCENT PERCENT</TD>
<TD>15-Mon</TD>
  
```

On tools side



- Use these parameters to filter the query
 - 15 Mon → 854 spectra in the Be star spectra SSAP.



Conclusions



- New data models and improvement of protocols are needed BUT...
- Lot of work may be done today just using what we already have IF...
- We use it in an adequate way.

Thanks