

VO and Euro-VO status

Round the clock:

Europe (incl.
ESA, ESO
+ 6 partners)

China

India

Canada

Spain

Italy

Armenia

France

Germany

Hungary

Japan

Korea

USA

Russia

UK (AstroGrid)

Australia

IVOA and the VO projects



IVOA, Euro-VO and the VO projects

- Each project has its own goals, determined by the national context
- International Virtual Observatory Alliance

All VO projects

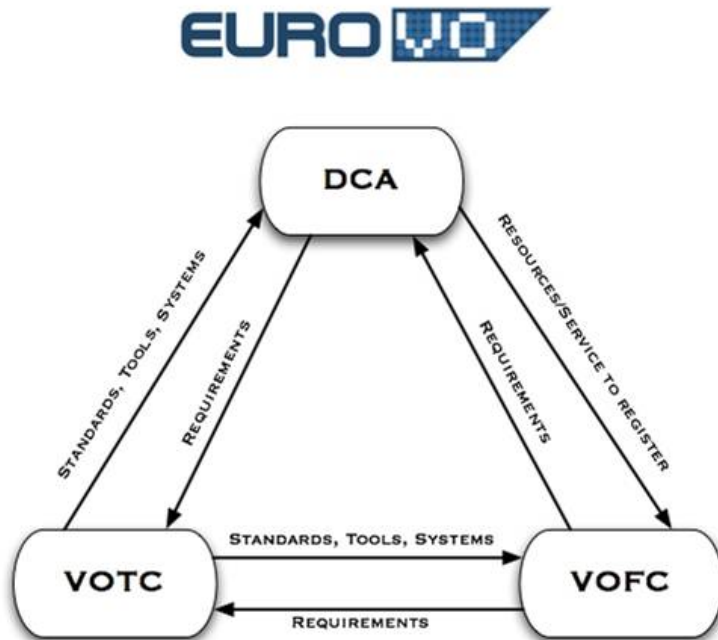
Based on best effort



Definition of the Interoperability standards

- Euro-VO: alliance of European VO projects, also based on best effort, EC support as a ‘glue’

The Euro-VO vision



Three interacting elements

- Facility Centre
- Data Centre Alliance
- Technology Centre

- Different interacting activities, talking to different user communities

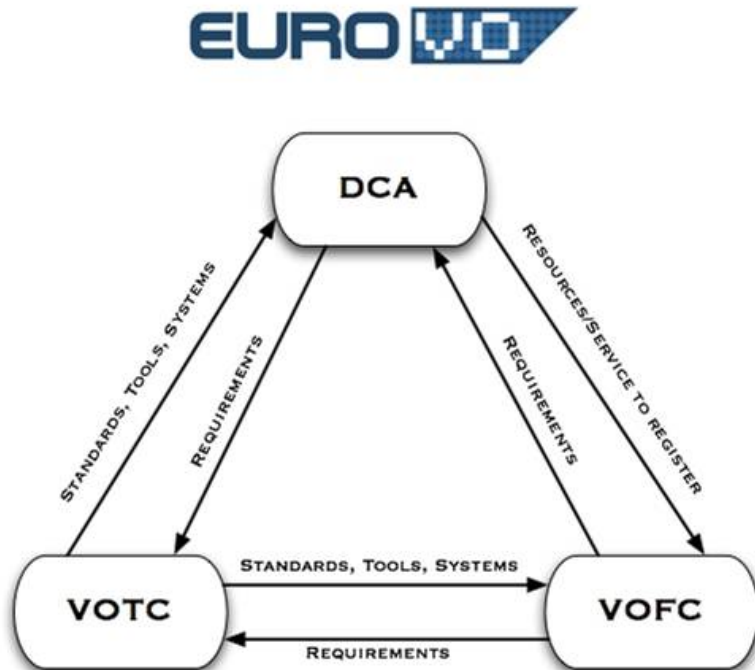
EC projects (FP5, FP6)

- FP5:
 - Precursor: *AstroVirtel*
 - R&D *Astrophysical Virtual Observatory* (2001-2004)
- FP6
 - Design Study *VO-TECH* + partners' technological projects (2005-2008): building the framework
 - Coordination Action *Data Centre Alliance* (2006-2008) (in Communication Network Development): support to data centres for the framework take-up
 - Some OPTICON/RadioNet/EuroVO partners' money for the Facility Centre

Transition phase for the VO

- From the construction of the infrastructure to operations by data centres and usage by the science community
- Recent significant progress in the remaining major standards
- On-going assessment of IVOA
- Strengthening of the technical coordination
- Remains a **bottom-up, best effort** alliance

Euro-VO in FP7



- Support to the global picture
- Better is phase with FP7 emphasis on 'knowledge infrastructure'
- But several calls and not so much money
- Proposal Euro-VO AIDA to 'Scientific Digital Repository'

Euro-VO AIDA

- Astronomical Infrastructure for Data Access
- Support to all aspects of Euro-VO
- Two user communities: astronomers, data providers
- *SAC for high level scientific oversight*
- *Call for scientific proposals*
- *Workshops, tutorials aimed at scientists, data providers*
- Support to data providers
- Technology activities
- CNRS, ESA, ESO, INAF, INTA, UEDIN/AstroGrid, UH/ARI, RUG/NOVA

The VO and the science community

- The VO aims at providing astronomers with new data and new tools – a new research infrastructure (cf. the advent of the Web)
- Lots of work to build the infrastructure (the interoperability standards)
- Links with the science community are critical
 - incremental release of data and tools
 - usage and feedback from usage

Measurement of success??

- Success will be when scientists will use seamlessly VO-enabled data and services
- Already the case for some tools
- Just show how the VO can help in the astronomers' everyday work
- Presence in 'normal' symposia, not only in dedicated ones

How to improve the science community usage of the VO?

- A task for the national projects – best knowledge of the local community - but not easy and very diverse situations for the different projects
- Take advantage of the Euro-VO level
 - Web page
 - Focussed workshops (to reach specific communities) cf. Spectroscopy & the VO
 - Scientific AO
 - Science tutorials
 - Others?

Useful and useable tools are one key

- Lots of work behind the scene to build the infrastructure (cf the provision and networking of astronomical bibliographic information) but the complexity is at technical level, not at user level
- Examine aims and useability of tools

ALADIN

Load... Save... Tools... Print... Help... Quit

Position J2000 03:22:21.94 +12:55:30.2 Pixel full unknown

ESO DSS2-blue~1

1995 WL4

Jungmann

16.8' x 16.8'

19.96' x 19.99'

Solar 50.573

ESO DSS2-b

- ESO DSS2-blue~1 - provided by The Digitized Sky Survey from ESO (Garching)

12797	1995 WL4	50.6176318599	12.9620538981	18.143
40441	Jungmann	50.515470357	12.7983030994	18.129
163973	2001 UT99	50.4591464049	12.8587799103	20.247
208529	2002 VV28	50.5530149806	12.8468041369	19.307

(c)1999-2005 ULP/CNRS - Centre de Données astronomiques de Strasbourg

2 planes, 1 view, 2Mb

Service
SkyBot
of I'IMCCE

+

Aladin (CDS)

+

VO standard
(VOTable)

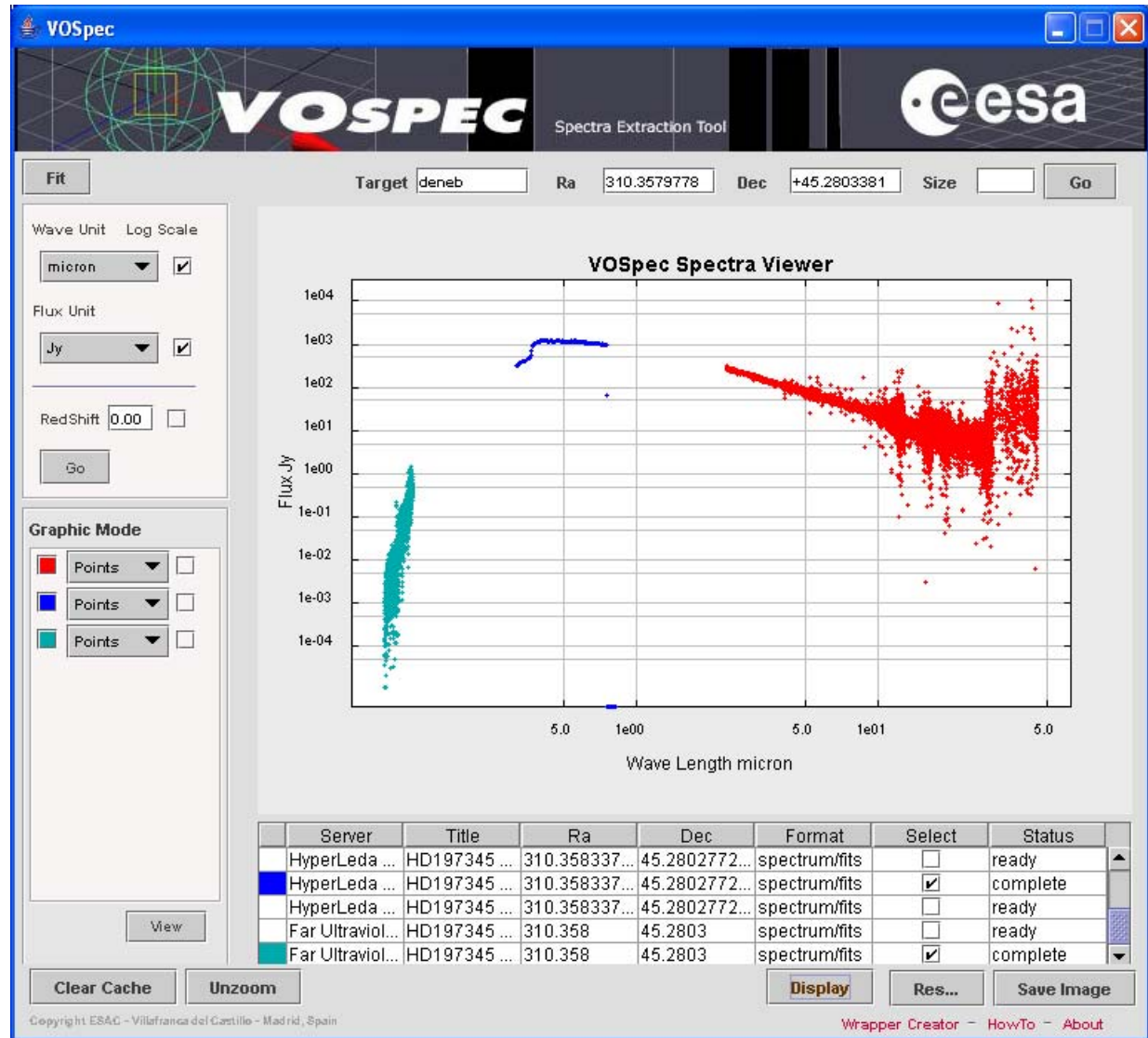
Collaboration

ESAC

IAP

Obs. Paris

Obs. Lyon



Lists of spectral lines in VO services

SLAP Viewer Copyright ESAC, Spain

Server Selector

SLAP Services

- IASD - Simple Line Access Data Server
 - <http://esavo02.esac.esa.int/slap/jsp/slapBeta.jsp?>

Select

Range of Search (μm):

Wavelength Start Wavelength End

Reset

Slap Services Output

Wavelength	Id	Transition	SourceType	ObsFlux	Intensity	Noise
18.72200	[SIII]	3P1-3P2	L	3.149999...	null	100.000
21.84100	[ArIII]	3P1-3P0	L	6.999999...	null	null
28.23200	H2	0-0 S(0)	L	7.799999...	null	null
33.49800	[SIII]	3P0-3P1	L	8.029999...	null	85.000
36.03100	[NeIII]	3P1-3P0	L	2.679999...	null	15.000
6.65888	[NII]	3P1-3P0	L	1.000000...	null	10.000

Close

VOSpec Spectra Extraction Tool

Target: 326.44+00.91 Ra: 235.5716667 Dec: -53.975556 Size: .1 Go

Simple Line Access

Wave Unit: Log Scale:

Flux Unit:

RedShift: 0.00

Go

Graphic Mode

- Points
- Points

View

Clear Cache Unzoom (1,8778E1, 3,459E1) Display Res... Save Image

Copyright ESAC - Villafranca del Castillo - Madrid, Spain

Wrapper Creator - HowTo - About

VOSpec Spectra Viewer

Server	Title	Ra	Dec	Format	Select	Status
Infrared Spa...	ISO LWS01 ...	235.571265	-53.97539	spectrum/fits	<input checked="" type="checkbox"/>	complete
Infrared Spa...	ISO SWS01 ...	235.571265	-53.97539	spectrum/fits	<input checked="" type="checkbox"/>	complete

Large projects are another key

- Cf the list established by the SAC
- Make sure that data from large projects are published in the VO
- Find a contact point for each project

Talking to the thematic communities is still another key

- Specific examples
- Customization/subset of the standards
- How to build the contact?
- How to be present in ‘normal’ Symposia?