

New developments for the CDS Portal

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Thomas Boch - IVOA Interop meeting
Strasbourg - 27 May 2009



Outline

- What is the CDS Portal ?
- New features
- Technologies used
- Demo



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What is the CDS Portal ?

- CDS services mash-up
- 2 main goals:
 - Provide a **uniform access point to CDS services**, running in a web browser
 - Facilitate **workflow between services**
- Web interface : no installation needed



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New features

- Integration of *SimPlay* (simple interactive viewer for Simbad objects)
- Upload of users local VOTables
- Save list of Simbad objects to portal
- Query VizieR with a list of positions
- Download of saved tables in different formats: VOTable, **CSV, TSV**
- Definition and implementation of users quota (*registered users: 500MB, anonymous users: 100MB*)
- Server-side generation of 2D plots
 - “*Shift the result, not the data*”



Technologies/standards used (1/2)

- GWT
 - Google Web Toolkit
 - Framework to build Web applications
 - Develop, test and debug in Java, then compile to Javascript
 - RPC mechanism between client and server
- 3rd party JS libraries
 - Prototype, Scriptaculous
 - Linked to GWT through JSNI (JavaScript Native Interface)
 - Allows to call JS from Java (GWT), and vice versa
- Flex
 - Used for development of SimPlay
 - Adobe framework to build Rich Internet Applications
 - ‘Flash for developers’



Technologies/standards used (2/2)

- iRODS
 - Storage system deployed at CDS
- VOTable
 - Data internally stored as VOTable
 - “Empty” VOTable stored for fast retrieving of metadata
- UCDS
 - Retrieve columns with coordinats information
- STIL
 - Efficient VOTable parsing
- STILTS
 - Generation of 2D plots



Demo

- SimPlay

The screenshot displays the SimPlay interface. On the left, the 'Recherche' (Search) panel shows 'Cible : NGC 2442' and a list of examples including 'M51', 'NGC 2442', 'M 2', and 'NGC 1055'. The central panel shows a deep-field image of the galaxy NGC 2442 with several green and blue data points overlaid on its structure. On the right, the 'Objets' (Objects) panel lists various object types with checkboxes, including 'Etoile (2)', 'Galaxie (3)', 'Nebuleuse', 'Région HII (39)', 'Objet Infrarouge (2)', 'Objet UV', 'Autre type (1)', 'Radio, HI, Maser', and 'Objet X (2)'. Below the image is a 'Données' (Data) table with columns for TYPE, OTYPE, MAIN_ID, RA, DEC, B, V, SP_TYPE, PMRA, PMDEC, BIBLIST, and GALDIM_M.

TYPE	OTYPE	MAIN_ID	RA	DEC	B	V	SP_TYPE	PMRA	PMDEC	BIBLIST	GALDIM_M
Galaxie	LINER	NGC_2443	07 36 23.90	-69 31 47.0	11.15					108	4.168
Galaxie	Galaxy	[VC94] NGC 2434_2	07 36 40.71	-69 26 38.6						1	
Galaxie	Galaxy	LEDA_100030	07 36 40.70	-69 26 39.0						1	
Région HII	HII	[SD93]_1	07 35 44.80	-69 31 38.0						1	
Région HII	HII	[SD93]_3	07 35 49.20	-69 31 13.0						1	
Région HII	HII	[SD93]_2	07 35 46.20	-69 31 32.0						1	
Région HII	HII	[SD93]_4	07 35 50.10	-69 31 06.0						1	



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- Server-side generation of 2D plots

[demo](#) [Preferences](#) [Logout](#)

[Portal](#) [My data](#)

X and Y Axis

RAJ2000 Logarithm Flip

DEJ2000 Logarithm Flip

Auxiliary Axis




Text properties

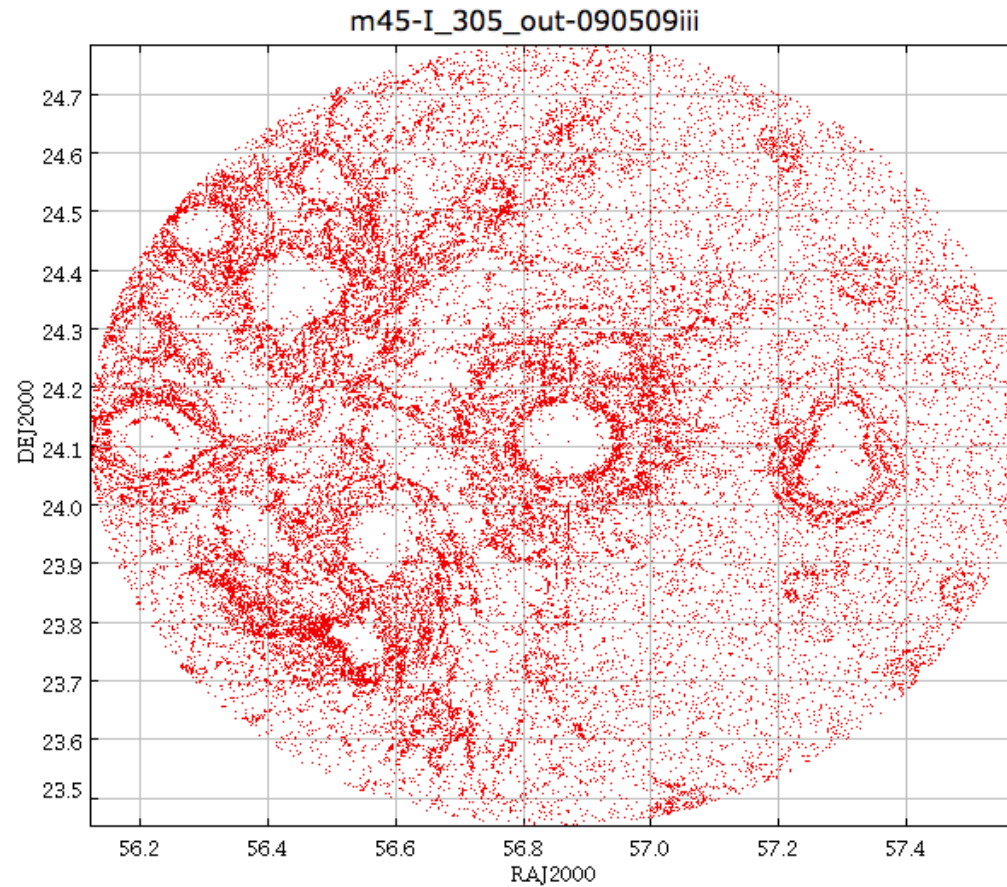
Advanced Options

Output

Full software available here !

Plot Image



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CDS Portal v.1.0

- First public release planned for next month



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Portal architecture

