

SCIENCE CASE:

Select barred galaxies in Virgo Cluster with both
available images and spectra

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- ALADIN

1. select the EVCC catalogue

Aladin v9.0

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location: *DSS *SDSS *2MASS

Select.src

Server selector

Others: HIPS, File, all VO, Watch, FoV..., Tools...

Image servers: Aladin images, SkyView, UKIDSS, Sloan, DSS..., VLA..., Archives..., Others...

Catalog servers: All VizieR, Surveys, Missions, SIMBAD, NED, SkyBot, Gaia, Others..

VizieR catalog service ?

Specify a target, and a catalog name or identification...

Target (ICR...: 12 29 19.93 +10 10 14.5 Grab co... ☐ All columns ☒ Whole catalog

Catalog: evcc Radius: 20.86°

Info. Coverage (MOC)

... don't know which catalog ? Select the potentially interesting ones with words/keywords !

Author, free text...: evcc

Wavelength	Mission	Astronomy
Radio	AKARI	Abundances
IR	ANS	Ages
optical	ASCA	AGN
UV	BeppoSAX	Associations
EUV	CGRO	Atomic_Data

Reset Clear SUBMIT Close ?

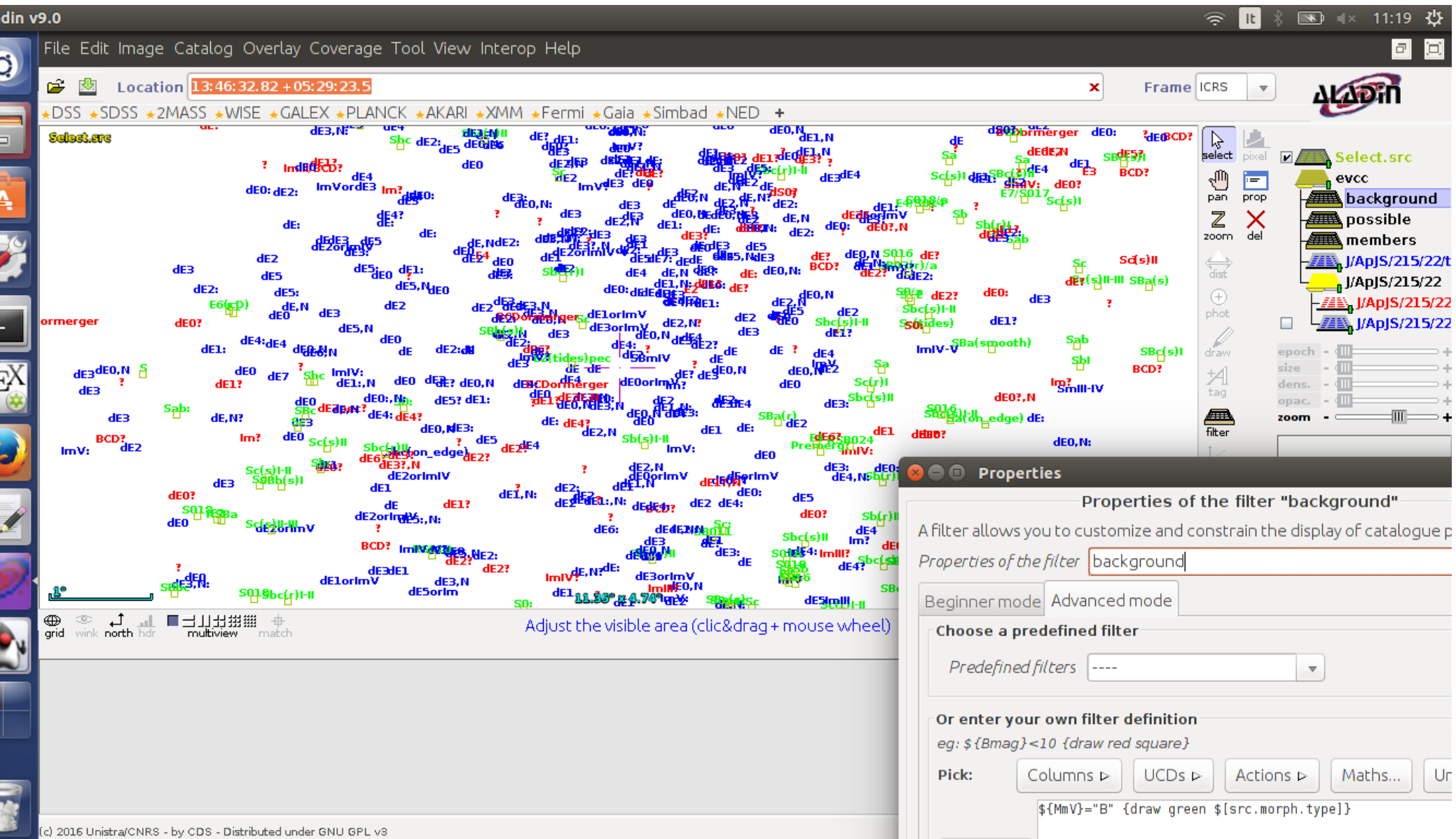
Search

21.35° × 21.35°

V	VCC	NGC	RAJ2000	DEJ2000	cz	MmV	MTypV	u _{mag}	q _{mag}	r _{mag}	i _{mag}	z _{mag}	Rad	R50	DR7	Sloan	Simbad	NED
VizieR	2038		191.5945	11.8765	13301.1	B	E1	16.41	14.64	13.78	13.31	13.01	33.92	6.63	DR7	Sloan	Simbad	NED
VizieR	2041		191.6405	11.8967	14073.6	B	E6(cD)	16.26	14.58	13.9	13.34	13.01	48.11	8.26	DR7	Sloan	Simbad	NED
VizieR	2044		191.6931	9.8506	7154.8	B	RSBa	16.11	14.51	13.73	13.33	13.09	47.31	9.99	DR7	Sloan	Simbad	NED
VizieR	2046		191.7368	9.857	7355	B	E2	16.48	14.74	14	13.51	13.27	34.4	6.39	DR7	Sloan	Simbad	NED
VizieR	2055		191.9324	9.8893	7220.4	B	S018	17.2	15.58	14.77	14.37	14	26.45	4.05	DR7	Sloan	Simbad	NED
VizieR	2076		192.1417	9.1299	13873.5	B	SBbc	16.88	15.49	14.84	14.41	14.13	21.66	4.66	DR7	Sloan	Simbad	NED
VizieR	2077		192.1484	10.8751	12130.4	B	Sab:	17.34	15.74	15.07	14.69	14.43	21.8	5.75	DR7	Sloan	Simbad	NED
VizieR	2082		192.4928	11.2639	7425	B	S	17.3	16.25	15.87	15.67	15.37	26.51	5.61	DR7	Sloan	Simbad	NED

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2. create filters



- TOPCAT
- 1. export the table of one filter
- 2. create a sub-selection with subsets

The screenshot displays the TOPCAT software interface. The main window shows the 'Table Browser for 1: Select.src' with a table of astronomical data. The 'Column Classification' dialog is open, showing the 'Query' tab with 'Classification value: MTypV' and 'Results' tab with 'Number of categories: 50 / 111'. The dialog lists various spectral types and their corresponding MTypV values, with checkboxes for selection.

Table Browser for 1: Select.src

	_RAJ2000	_DEJ2000	_V	VCC	NGC	RAJ2000	DEJ2000	cz	MmV	MTypV
3	182,4348	12,1258	VizieR	12		182,4348	12,1258	8643,3	B	SBa(s)
126	186,6843	9,048	VizieR	934		186,6843	9,048	6957,8	B	SBa(s)
178	189,55	7,8126	VizieR	1748		189,55	7,8126	11453,8	B	SBa(s)
189	190,0477	5,3783	VizieR	1824		190,0477	5,3783	14073,	B	SBa(s)

Column Classification Dialog

Query: Classification value: **MTypV** [Classify] [Stop]

Results: Number of categories: 50 / 111
Subset name prefix: MTypV_

7	Sa	MTypV_5	<input type="checkbox"/>
6	S0	MTypV_6	<input type="checkbox"/>
6	SBc	MTypV_7	<input checked="" type="checkbox"/>
6	Sbc	MTypV_8	<input type="checkbox"/>
5	SBa	MTypV_9	<input checked="" type="checkbox"/>
5	S016	MTypV_10	<input type="checkbox"/>
4	SBa(s)	MTypV_11	<input checked="" type="checkbox"/>
4	Sc(s)I	MTypV_12	<input checked="" type="checkbox"/>

[Add Subsets] [Cancel]

Testo semplice ▾ Larg. tab.: 8 ▾ Rg 65, Col 1 ▾ INS

TGAS **UCAC5** **Hipparcos** **HSOY**

Proper Motion ☐ Parallax ☐ Proper Motion ☐ Parallax ☐ Proper Motion ☐

So now I have:

a list of objects and I need both images and spectra from any catalogue or survey...

- ALADIN: various infos but for only ONE object
- SIMBAD: more than one object but I need to know the catalogue

... so I need a NEW TOOL!!!!

- ... SVO Discovery tool!!!!



SVO DISCOVERY TOOL

List of object names
(one line each)

List of object coordinates
(RAJ2000, DEJ2000)
(one line each)

Allowed format:

239.1667629 -22.0277814

15:56:40.023 -22:01:40.01

► VO Services (Radius: arcsec)

☐ Images

☐ Spectra

► Physical Parameters (Radius: arcsec)

- SVO Discovery tool
- For each object:

Object: 182.4348 12.1258

Physical parameters

Parameter	Number of results found	Number of valid results	Min	Max	Mean	St
Teff	0	0	?	?	?	?
Logg	0	0	?	?	?	?
M/H	0	0	?	?	?	?
ColorExcess	5	5	0,006	0,11	0,052	0,0
Age	1	1	9,011	9,011	9,011	0
RadialVel	10	10	8496	8666,1	8635,64	50
Sptype	0					

VO Image Services

Services	Results
52	2280

Service name	Results
2MASS ASKY AT	12
2MASS QL	12
3XMM-DR7-SIA	1
AllWISE L3a	4
CADC Image Search (SIA)	339
DFBS	3
DSS	6
DSS ESO	16
HEAVENS @ ISDC	4
HHLI	28
HeVICS	32
Herschel SIAP	44
IRIS	22

VO Spectrum Services

Services	Results
1	116

Service name	Results
IRSA SSA	116

- SVO Discovery tool

1. send to SAMP

physical

parameters

TOPCAT(2): Table Browser

Window Subsets Help

Table Browser for 2: VoDiscoveryResultsSummary

	Target	RA	Dec	Parameter	Found	Valid	Min	Max	Mean	StdDev
1	182.4348 12.1258	182,4348	12,1258	Teff	0	0				
2	182.4348 12.1258	182,4348	12,1258	Logg	0	0				
3	182.4348 12.1258	182,4348	12,1258	M/H	0	0				
4	182.4348 12.1258	182,4348	12,1258	Color	5	5	0,006	0,11	0,0524	0,04673
5	182.4348 12.1258	182,4348	12,1258	Age	1	1	9,011	9,011	9,011	0,
6	182.4348 12.1258	182,4348	12,1258	RadialVel	10	10	8496,	8666,1	8635,64	50,58876
7	182.4348 12.1258	182,4348	12,1258	Sptype	0	0				
8	186.6843 9.048	186,6843	9,048	Teff	0	0				
9	186.6843 9.048	186,6843	9,048	Logg	0	0				
10	186.6843 9.048	186,6843	9,048	M/H	0	0				
11	186.6843 9.048	186,6843	9,048	Color	3	3	0,	0,026	0,017	0,01473
12	186.6843 9.048	186,6843	9,048	Age	1	0				
13	186.6843 9.048	186,6843	9,048	RadialVel	6	6	6812,	6957,8	6920,78333	53,88426
14	186.6843 9.048	186,6843	9,048	Sptype	2	0				
15	189.55 7.8126	189,55	7,8126	Teff	0	0				
16	189.55 7.8126	189,55	7,8126	Logg	0	0				
17	189.55 7.8126	189,55	7,8126	M/H	0	0				
18	189.55 7.8126	189,55	7,8126	Color	3	3	0,	0,029	0,01933	0,01674
19	189.55 7.8126	189,55	7,8126	Age	0	0				
20	189.55 7.8126	189,55	7,8126	RadialVel	6	6	11308,	11453,8	11358,91667	67,10572
21	189.55 7.8126	189,55	7,8126	Sptype	2	0				
22	190.0477 5.3783	190,0477	5,3783	Teff	0	0				
23	190.0477 5.3783	190,0477	5,3783	Logg	0	0				

2. download or send to SAMP the selected image



So, Thank you!