

VizieR: Catalogs and associated data

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- 1) VizieR
- 2) Associated data



VizieR Staff and contributors:

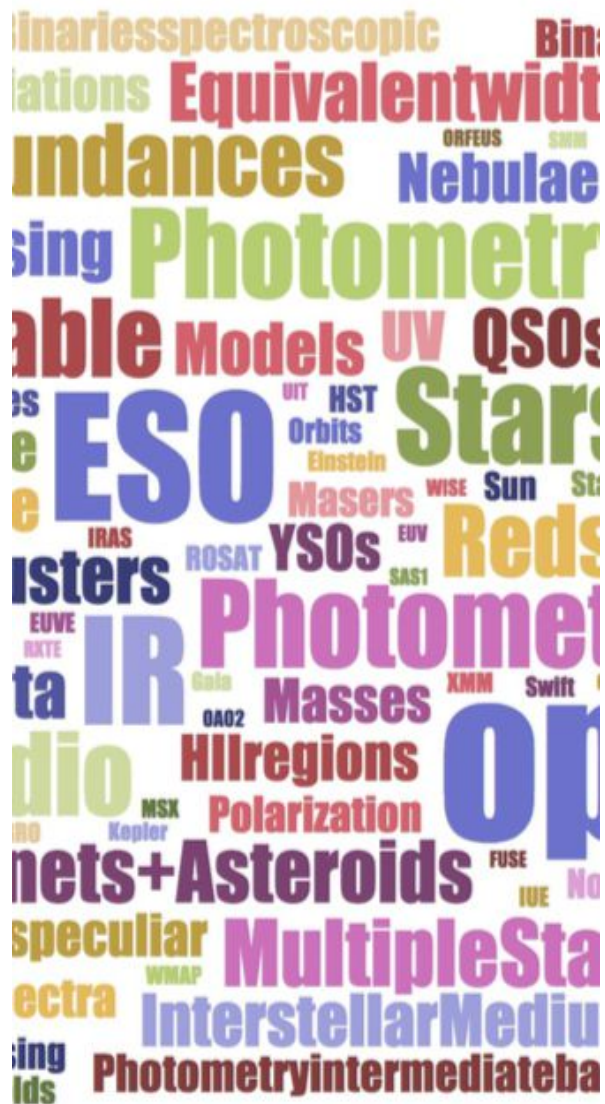
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What is VizieR ? - I



The VizieR **service** provides unified access to a very large collection (>19,800) of astronomical catalogues & associated data:

- **Reference catalogues & surveys** of astronomical sources at all wavelengths (e.g. GAIA, SDSS, Pan-STARRS, 2MASS, Dark Energy Survey, UCAC, WISE, ...)
- Tables from papers published in the major astronomical **journals** (1100-1200 cats/yr)
- **Diversity** of astronomical data: astronomical sources, spectra, polarization data, but also models (evolutionary, populations, synthetic spectra, ...), statistical analyses, compilations, ...

What is VizieR ? - II

VizieR can be queried:

- By catalog name
- By wavelength, Mission name, object type / process, ...
- By keyword (galaxies, quasars, ISM, ...)
- By column description
- By position, through ALL catalogs (>50 years of observations)

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Wavelength	Mission	Astronomy
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Millimeter	ANS	Ages
IR	ASCA	AGN
optical	BeppoSAX	Associations
UV	CGRO	Asteroseismology
EUV	Chandra	Atomic_Data
X-ray	COBE	Binaries:cataclysmic



Meta data

The metadata describes the data:

- Type of data (catalog, spectra, light curves etc...)
- Units
- Wavelengths / filters / bands / instrument
- Magnitude system, Coordinates system
- Since 2018: time system

... with homogenized descriptions, using VizieR conventions

Goal: **Discoverability, reusability (FAIR)**,
platform for higher level services (phot.
Viewer, associated data, ...) = added value

Added value

Added value

I/A+A/549/A133/table3 Bright northern radio sources with VLA/VLA (Karlinsky, 2013)
 Post-announcement VLA/VLA source coordinates (J2000.0, SRA, L33K) Res(Mesta)

FullP	Source	RAJ2000 deg	DEJ2000 deg	ObsDate "Y-M-D"	SC mJy	ε mJy	SX mJy	ε mJy	n	SKa mJy	ε mJy	SQ mJy	ε mJy
1P	J0006-0623	001.557887	-06.393149	2010-07-02	2415.0	9.3	2301.6	14.9		1653.4	8.2	1369.1	10.0
2P	J0019+7327	004.940777	+73.458338	2009-08-27	1191.9	0.7	1224.7	1.4*		1051.2	4.0	901.9	6.0
3P	J0050-0929	012.672156	-09.484781	2010-07-23	254.1	1.0	209.9	1.4		123.7	0.6	115.2	0.0
4P	J0108+0135	017.161546	+01.583421	2010-07-23	3558.8	13.6	3909.3	25.4		2736.1	13.6	2295.3	16.0
5P	J0125-0005	021.370182	-00.098870	2010-08-03	1263.6	4.8				787.1	3.9	649.7	4.0
6P	J0137+3309 024 4220833	+33.159722	2009-08-27	5537.1	0.1	3267.0	0.1*		1234.9	0.1	635.4	0.0	
7P	J0137+3309 024 422081	+33.159759	2009-11-15	5543.7	0.4	3280.7	0.3*		1266.6	5.7	667.1	0.0	
8P	J0137+3309 024 422081	+33.159759	2010-07-02	5440.2	20.8	3278.5	21.3		858.1	4.3	670.7	4.0	
9P	J0137+3309 024 422081	+33.159759	2010-07-23	5438.7	20.8				858.9	4.3	669.5	4.0	
10P	J0137+3309 024 422081	+33.159759	2010-08-03	5434.5	20.8				858.1	4.3	669.8	4.0	
11P	J0137+3309 024 422081	+33.159759	2010-09-07	5428.6	20.8	3279.9	21.3		858.4	4.3	670.6	4.0	
12P	J0137+3309 024 422081	+33.159759	2010-09-20	5440.3	21.0				858.8	4.3	666.3	4.0	
13P	J0137+3309 024 422081	+33.159759	2010-09-24	5431.0	21.2				858.5	4.3	684.7	5.0	
14P	J0137+3309 024 422081	+33.159759	2010-10-20	5434.2	21.2				860.7	4.3	672.6	5.0	
15P	J0137+3309 024 422081	+33.159759	2010-11-09	5392.7	24.5				860.5	4.5	672.7	5.0	
16P	J0137+3309 024 422081	+33.159759	2010-11-20	5403.8	21.9				858.9	4.3	674.7	5.0	
17P	J0137+3309 024 422081	+33.159759	2010-11-27	5385.6	23.5	3316.1	23.0		861.8	4.4	674.0	5.0	
18P	J0217+7349 034 378389	+73.825728	2009-08-27	4253.2	1.0	4255.6	4.2*		2974.5	14.2	2169.1	17.0	
19P	J0217+7349 034 378389	+73.825728	2010-09-20	3874.4	14.9				2244.3	11.1	1922.5	14.0	
20P	J0217+7349 034 378389	+73.825728	2010-09-24						2284.8	11.3	2284.6	16.0	
21P	J0228+6721 037.208548	+67.350841	2010-09-20	1108.8	4.3				903.6	4.5	861.8	6.0	
22P	J0319+4130 049.950667	+41.511695	2010-09-07	14555.1	56.1	21103.0	137.0		18627.6	92.4	16539.0	121.0	
23P	J0336+3218 054.125448	+32.308151	2010-09-07			2095.6	13.6		2843.4	14.1	2571.6	18.0	
24P	J0359+5057 059.873947	+50.963934	2010-09-20	8834.3	33.8				8346.9	40.9	7162.9	52.0	
25P	J0418+3801 064.588654	+38.026611	2010-09-20	2827.4	19.6				2233.3	11.1	2077.3	15.0	
26P	J0423-0120 065.812500	-01.342500	2009-11-03						8505.0	0.1	9245.7	0.0	
27P	J0423-0120 065.815792	-01.342611	2009-11-03	3966.9	0.5	4398.9	0.5*		8585.7	0.6	9246.5	0.0	
28P	J0423-0120 065.815836	-01.342518	2010-09-07			6200.0	40.2		5651.5	28.0	5183.3	37.0	

Added value

IAA/549/A133/table3 Bright northern radio sources with VLA/JVLA (Karlinsky, 2013)
 Post-announcement VLA/JVLA source coordinates (2011AAA...589A...133K Res/Mesta)

Full P.	Source	RAJ2000 deg	DEJ2000 deg	ObsDate "Y:Mo:D"	SC mJy	ε mJy	SX mJy	ε mJy	fl.	SKa mJy	SQ mJy
1P	J0006-0623	001.557887	-06.393149	2010-07-02	2415.0	9.3	2301.6	14.9	1653.4	32	1369.1
2	J0019+7327	004.940777	+73.458338	2009-08-27	1191.9	0.7	1224.7	1.4*	1051.2	0	901.9
3	J0050-0929	012.672156	-09.484781	2010-07-23	254.1	1.0	209.9	1.4	123.7	0	285.5
4P	J0108+0135	017.161546	+01.583421	2010-07-23	3558.8	13.6	3909.3	25.4	2736.1	13.6	2295.3
5P	J0125-0005	021.370182	-00.098870	2010-08-03	1263.6	4.8			787.1	3.9	649.7
6P	J0137+3309	024.422081	+33.159722	2009-08-27	5537.1	0.1	3267.0	0.1*	1234.9	0.1	635.4
7P	J0137+3309	024.422081	+33.159759	2009-11-15	5543.7	0.4	3280.7	0.3*	1266.6	5.7	667.1
8P	J0137+3309	024.422081	+33.159759	2010-07-02	5440.2	20.8	3278.5	21.3	858.1	4.3	670.7
9P	J0137+3309	024.422081	+33.159759	2010-07-23	5438.7	20.8			858.9	4.3	669.5
10P	J0137+3309	024.422081	+33.159759	2010-08-03	5434.5	20.8			858.1	4.3	669.8
11P	J0137+3309	024.422081	+33.159759	2010-09-07	5428.6	20.8	3279.9	21.3	858.4	4.3	670.6
12P	J0137+3309	024.422081	+33.159759	2010-09-20	5440.3	21.0			858.8	4.3	666.3
13P	J0137+3309	024.422081	+33.159759	2010-09-24	5431.0	21.2			858.5	4.3	684.7
14P	J0137+3309	024.422081	+33.159759	2010-10-20	5434.2	21.2			860.7	4.3	672.6
15P	J0137+3309	024.422081	+33.159759	2010-11-09	5392.7	24.5			860.5	4.5	672.7
16P	J0137+3309	024.422081	+33.159759	2010-11-20	5403.8	21.9			858.9	4.3	674.7
17P	J0137+3309	024.422081	+33.159759	2010-11-27	5385.6	23.5	3316.1	23.0	861.8	4.4	674.0
18P	J0217+7349	034.378389	+73.825728	2009-08-27	4253.2	1.0	4255.6	4.2*	2974.5	14.2	2169.1
19P	J0217+7349	034.378389	+73.825728	2010-09-20	3874.4	14.9			2244.3	11.1	1922.5
20P	J0217+7349	034.378389	+73.825728	2010-09-24					2284.8	11.3	2284.6
21P	J0228+6721	037.208548	+67.350841	2010-09-20	1108.8	4.3			903.6	4.5	861.8
22P	J0319+4130	049.950667	+41.511695	2010-09-07	14555.1	56.1	21103.0	137.0	18627.6	92.4	16539.0
23P	J0336+3218	054.125448	+32.308151	2010-09-07			2095.6	13.6	2843.4	14.1	2571.6
24P	J0359+5057	059.875947	+50.963934	2010-09-20	8834.3	33.8			8346.9	40.9	7162.9
25P	J0418+3801	064.588654	+38.026611	2010-09-20	2827.4	19.6			2233.3	11.1	2077.3
26P	J0423-0120	065.812500	-01.342500	2009-11-03					8505.0	0.1	9245.7
27P	J0423-0120	065.815792	-01.342611	2009-11-03	3966.9	0.5	4998.9	0.5*	8585.7	0.6	9246.5
28P	J0423-0120	065.815836	-01.342518	2010-09-07			6200.0	40.2	5651.5	28.0	5183.3

Added value

I/A+A/549/A133
Post annotation

II/311/wise
Post annotation

WISE All-Sky Data Release (Cutri+ 2012)
The WISE All-Sky data Release; please *acknowledge* the usage of the WISE data products (563921584 rows)

2012/Cutri_11_06 ReadMe.htm



Full P.	Source	Full	WISE	RAJ2000	DEJ2000	exMaj	exMin	W1mag	W2mag	W3mag	W4mag
				deg	deg	arcsec	arcsec	mag	mag	mag	mag
1 P	J0006-0623	1	J122902.49+015316.0	187.260381	+01.887784	0.299	0.275	15.4510.052	15.2140.126	11.9600.29	
2	J0019+7327	2	J122904.24+015315.2	187.267696	+01.887558	0.637	0.588	16.4080.102	16.0930.274	12.639	
3	J0050-0929	3	J122855.66+015441.1	187.231933	+01.911430	0.972	0.879	16.8550.146	16.471	12.544	
4 P	J0108+0135	4	J122854.39+015506.8	187.226636	+01.918556	0.260	0.238	15.2160.046	15.1110.118	12.564	
5 P	J0125-0005	5	J122854.14+015451.4	187.225603	+01.914284	1.382	1.241	17.2810.213	16.267	12.511	
6 P	J0137+3309	6	J122845.69+015455.9	187.190380	+01.915539	0.206	0.189	14.7850.039	14.7920.095	12.155	
7 P	J0137+3309	7	J122849.04+015417.7	187.204369	+01.904939	1.002	0.919	16.8850.153	16.831	12.207	
8 P	J0137+3309	8	J122847.00+015441.6	187.195854	+01.911573	0.992	0.944	16.8970.155	16.686	12.115	
9 P	J0137+3309	9	J122853.00+015530.4	187.220856	+01.925131	1.114	1.020	16.1160.083	15.7010.197	11.6630.24	
10 P	J0137+3309	10	J122847.39+015458.3	187.197478	+01.916203	0.565	0.525	16.9900.172	16.178	12.422	
11 P	J0137+3309	11	J122851.54+015519.8	187.214766	+01.922193	0.628	0.572	16.2140.091	16.105	12.154	
12 P	J0137+3309	12	J122850.17+015544.1	187.209054	+01.928917	0.454	0.418	16.3750.102	15.9360.238	12.609	
13 P	J0137+3309	13	J122845.40+015521.2	187.189180	+01.922580	0.286	0.262	15.3300.049	15.5320.169	12.4360.47	
14 P	J0137+3309	14	J122852.47+015505.7	187.218636	+01.918268	0.438	0.393	15.8740.071	16.0360.259	11.853	
15 P	J0137+3309	15	J122852.19+015458.0	187.217474	+01.916122	0.339	0.305	15.5640.058	15.2690.133	12.193	
16 P	J0217+7349	16	J122927.79+015443.8	187.365800	+01.912187	1.293	1.182	17.2430.212	16.081	12.631	
17 P	J0217+7349	17	J122924.23+015425.1	187.350980	+01.906983	1.068	0.971	16.9680.170	16.7290.486	12.325	
18 P	J0217+7349	18	J122927.51+015512.0	187.364625	+01.920000	0.991	0.923	16.9420.165	16.2410.312	12.580	
19 P	J0228+6721	19	J122927.17+015523.1	187.363248	+01.923086	0.591	0.537	16.2870.094	16.1290.287	12.572	
20 P	J0319+4130	20	J122928.39+015519.8	187.368299	+01.922181	1.252	1.154	17.1040.191	16.767	12.562	
21 P	J0336+3218	21	J122932.89+015628.5	187.387082	+01.941264	0.445	0.407	15.9780.075	15.9080.153	12.633	
22 P	J0359+5057	22	J122932.73+015616.6	187.386399	+01.937951	0.896	0.806	16.7970.147	16.4670.360	12.569	
23 P	J0418+3801	23	J122934.73+015658.2	187.394715	+01.949520	0.354	0.315	15.9180.071	14.7010.079	11.6960.23	
24 P	J0423-0120	24	J122933.53+015624.5	187.389748	+01.940144	0.587	0.540	16.2660.093	16.2340.295	12.470	
25 P	J0423-0120	25	J122936.21+015646.0	187.400909	+01.946117	0.994	0.882	16.9050.159	16.3520.328	12.592	
26 P	J0423-0120	26	J122906.95+015311.9	187.278966	+01.886659	0.622	0.572	16.4120.104	15.9150.229	11.877	


Added value

I/A+A/549/A133
Post annotation

II/311/wise
Post annotation

WISE All-Sky Data Release (Cutri+ 2012)
The WISE All-Sky data Release; please *acknowledge* the usage of the WISE data products (563921584 rows)

2012/Cutri+11_06 ReadMe.htm



Full P.	Source	Full	WISE	RAJ2000	DEJ2000	sc	Maj	sc	Min	W1mag	W2mag	W3mag	W4mag
				deg	deg	arcsec	arcsec	arcsec	arcsec	mag	mag	mag	mag
1P	J0006-0623	1	J122902.49+015316.0	187.260381	+01.887784	0.299	0.275	Im	15.451	15.214	12.639	12.544	
2	J0019+7327	2	J122904.24+015315.2	187.267696	+01.887558	0.637	0.588	Im	16.408	16.093	12.639	12.544	
3	J0050-0929	3	J122855.66+015441.1	187.231933	+01.911430	0.972	0.879	Im	16.855	16.471	12.544	12.544	
4P	J0108+0135	4	J122854.39+015506.8	187.226636	+01.918556	0.260	0.238	Im	15.216	15.111	12.566	12.566	
5P	J0125-0005	5	J122854.14+015451.4	187.225603	+01.914284	1.382	1.241	Im	17.281	16.267	12.511	12.511	
6P	J0137+3309	6	J122845.69+015455.9	187.190380	+01.915539	0.206	0.189	Im	14.785	14.792	12.155	12.155	
7P	J0137+3309	7	J122844.46+015450.3	187.185272	+01.913979	1.002	0.919	Im	16.885	16.831	12.207	12.207	
8P	J0137+3309	8	J122849.04+015417.7	187.204369	+01.904939	0.992	0.944	Im	16.897	16.686	12.115	12.115	
10P	J0137+3309	10	J122847.00+015441.6	187.195854	+01.911573	0.478	0.443	Im	16.116	15.701	11.663	11.663	
11P	J0137+3309	11	J122853.00+015530.4	187.220856	+01.925131	1.114	1.020	Im	16.990	16.178	12.422	12.422	
12P	J0137+3309	12	J122847.39+015458.3	187.197478	+01.916203	0.565	0.525	Im	16.214	16.105	12.154	12.154	
13P	J0137+3309	13	J122851.54+015519.8	187.214766	+01.922193	0.628	0.572	Im	16.375	15.936	12.609	12.609	
14P	J0137+3309	14	J122850.17+015544.1	187.209054	+01.928917	0.454	0.418	Im	16.024	15.532	12.436	12.436	
15P	J0137+3309	15	J122845.40+015521.2	187.189180	+01.922580	0.286	0.262	Im	15.330	15.462	12.281	12.281	
16P	J0137+3309	16	J122852.47+015505.7	187.218636	+01.918268	0.438	0.393	Im	15.874	16.036	11.853	11.853	
17P	J0137+3309	17	J122852.19+015458.0	187.217474	+01.916122	0.339	0.305	Im	15.564	15.269	12.193	12.193	
18P	J0217+7349	18	J122927.79+015443.8	187.365800	+01.912187	1.293	1.182	Im	17.243	16.081	12.631	12.631	
19P	J0217+7349	19	J122924.23+015425.1	187.350980	+01.906983	1.068	0.971	Im	16.968	16.729	12.325	12.325	
20P	J0217+7349	20	J122927.51+015512.0	187.364625	+01.920000	0.991	0.923	Im	16.942	16.241	12.580	12.580	
21P	J0228+6721	21	J122927.17+015523.1	187.363248	+01.923086	0.591	0.537	Im	16.287	16.129	12.572	12.572	
22P	J0319+4130	22	J122928.39+015519.8	187.368299	+01.922181	1.252	1.154	Im	17.104	16.767	12.562	12.562	
23P	J0336+3218	23	J122932.89+015628.5	187.387082	+01.941264	0.445	0.407	Im	15.978	15.908	12.633	12.633	
24P	J0359+5057	24	J122932.73+015616.6	187.386399	+01.937951	0.896	0.806	Im	16.797	16.467	12.569	12.569	
25P	J0418+3801	25	J122934.73+015658.2	187.394715	+01.949520	0.354	0.315	Im	15.918	14.701	11.696	11.696	
26P	J0423-0120	26	J122934.73+015658.2	187.394715	+01.949520	0.587	0.540	Im	16.266	16.234	12.470	12.470	
27P	J0423-0120	27	J122933.53+015624.5	187.389748	+01.940144	0.994	0.882	Im	16.905	16.352	12.592	12.592	
28P	J0423-0120	28	J122936.21+015646.0	187.400909	+01.946117	0.622	0.572	Im	16.412	15.915	11.877	11.877	
29P	J0452-0130	29	J122906.95+015311.9	187.278966	+01.886659	0.622	0.572	Im	16.412	15.915	11.877	11.877	

Added value

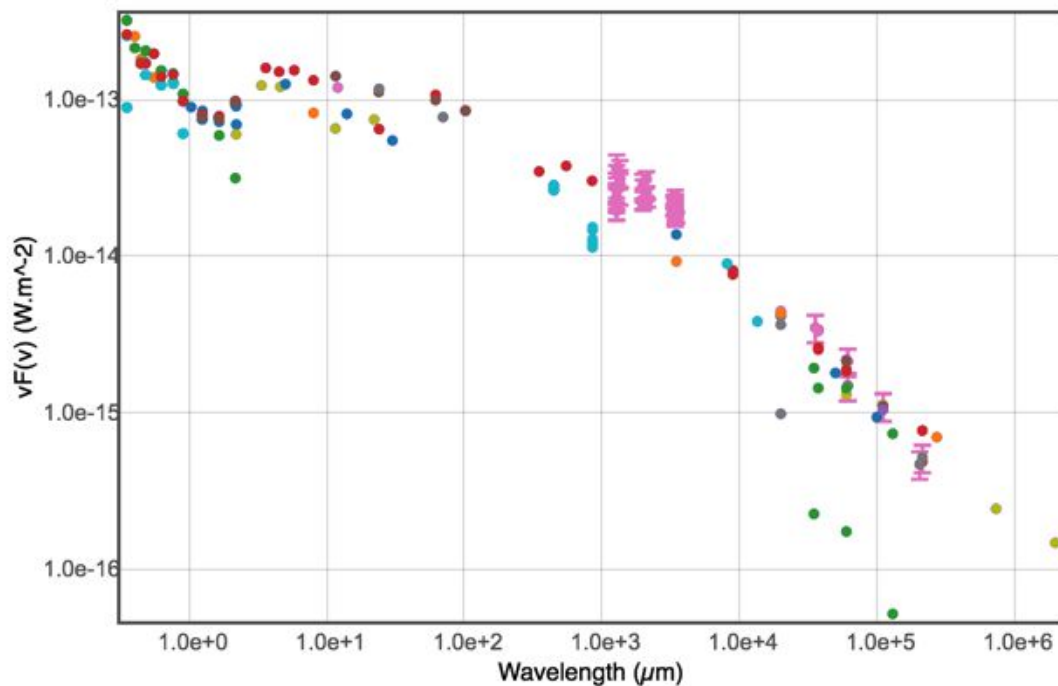
VizieR Photometry viewer

[share +](#)

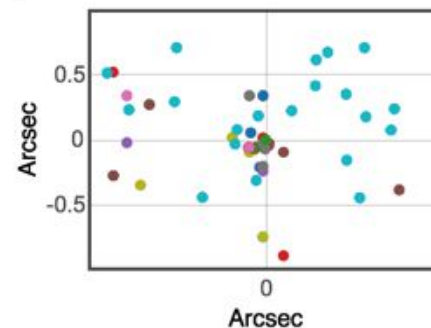
Target
Radius (in arcsec)



3c273 (12 29 6.695+02 03 8.662),
radius : 1 arcsec



Mouse position:
Wavelength :
2.96e+3 μm
Frequency :
1.01e+2 GHz
Energy :
4.18e-4 eV
Flux density or F(ν) :
5.70e+2 Jy
νF(ν) :
5.77e-13 W.m⁻²
F(λ) :
1.95e+4 erg.s⁻¹.cm⁻².μm⁻¹



Added value (continued, non-exhaustive)

Durability of storage / archive, availability

- Multi-site backups and mirrors

Diversity of access modes, interoperability

- VO protocols and tools, TAP, Topcat, Aladin, Python astroquery, ...

Indexation (metadata), curation / validation by CDS documentalists

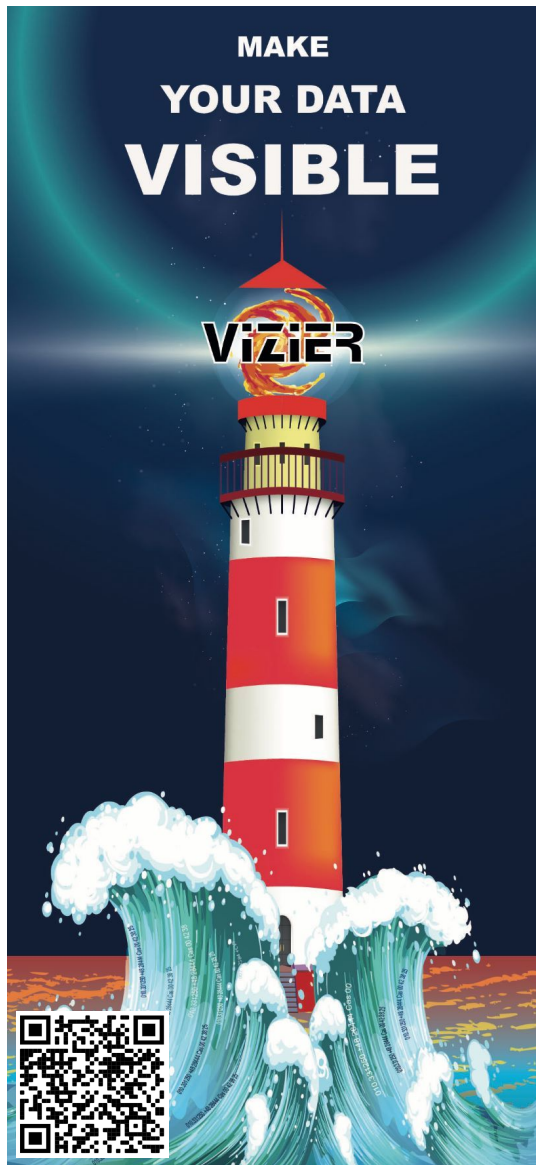
Fluid cross-catalog navigation and visualization

- Links to original samples and between tables
- Visualizations of data in tables highlights your data / results

Digital Objects Identifiers

- Improve traceability and discoverability, citeability of your dataset

Help CDS help you



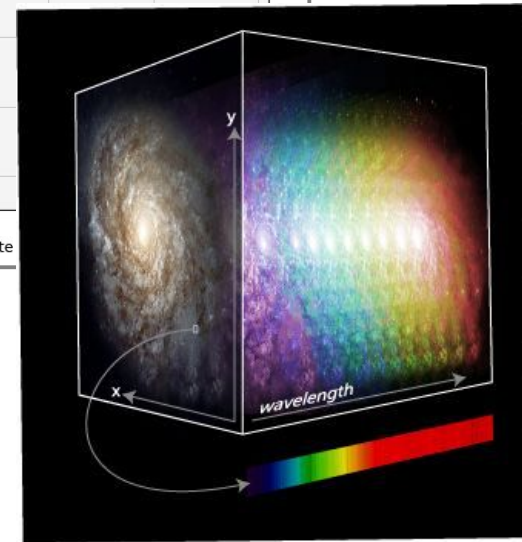
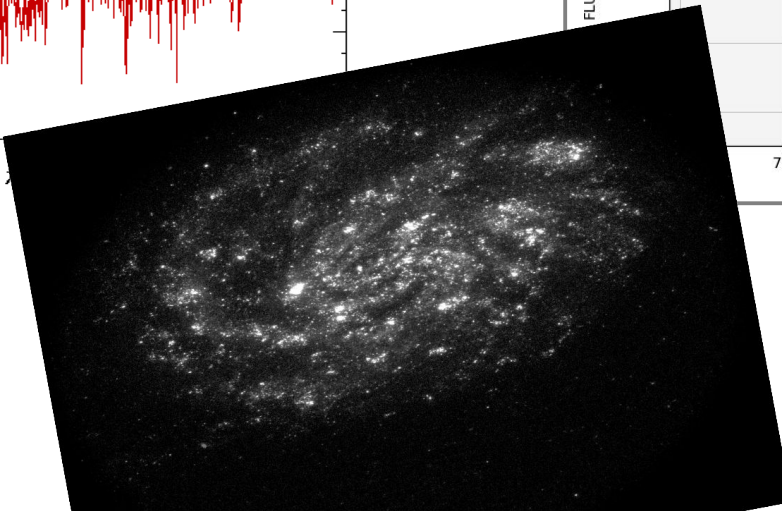
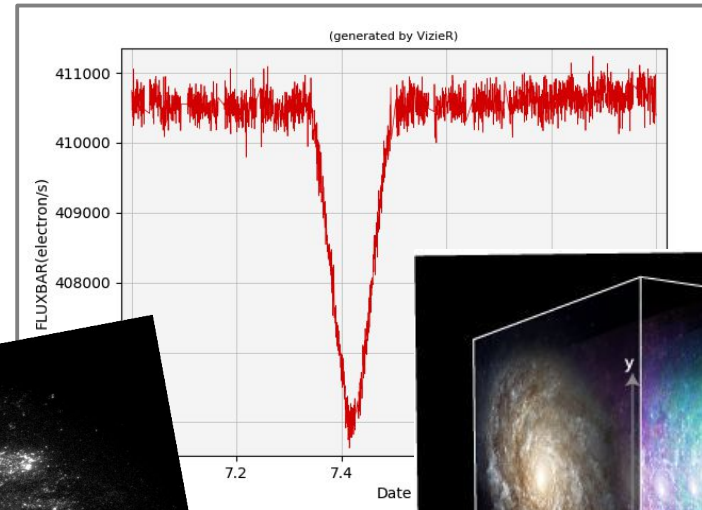
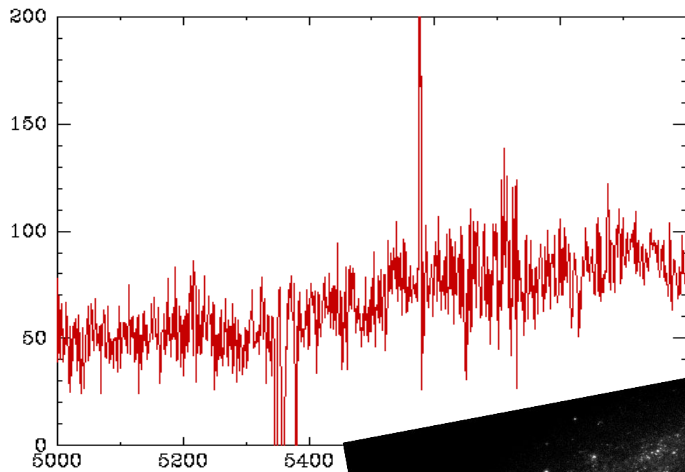
- VizieR submit page: <https://cdsarc.unistra.fr/vizier.submit/>
- Check the “make your data visible” brochure: http://cdsarc.u-strasbg.fr/submit/Make_your_data_visible.pdf
- In general, a few simple rules to help smooth the process=> get your data online:
 - Avoid object names truncations
 - Use existing names, use CDS dictionary: <http://cds.u-strasbg.fr/Dic>
 - Provide coordinates, as often as possible.
 - One quantity per column! don't mix:
 - Limits and errors
 - Different filters in same column
 - Different units
- => Electronic tables need not / should not be an exact copy of paper table

FAIR Associated data publication


Data management plans increasingly require publication of the data used to produce the article tables: images, spectra, data cubes, time series...


Preferably in reduced form rather than raw (available at telescope archive).

Important aspect of results reproducibility and open science (FAIRness)



VizieR Associated data web page

Simple search  ObsTAP Query

Search by position :  radius deg



Search by spectral band : min max μm -

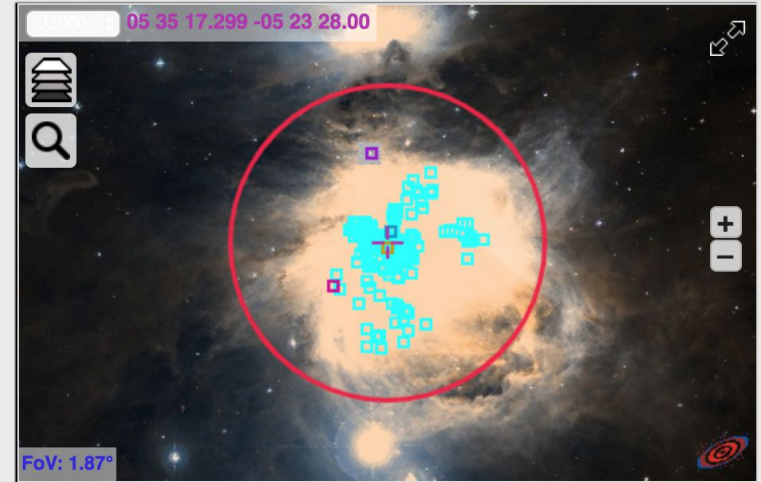
Search by time data : start stop (MJD)

Search by catalog: Identifier:

Spectrum / Time series Image

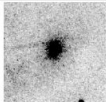

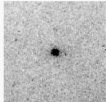

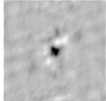

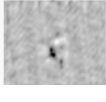

500 entries max



Show 10 entries

500 entries

Preview	Target	Data collection	Ra	Dec	Band min (nm)	Band max (nm)	Begin time (MJD)	End time (MJD)	Facility	
		J/AJ/136/2136	83.807	-5.546	801.500	1,094.600			HST	<input type="button" value="Download"/> <input type="button" value="Search"/> <input type="button" value="Header"/> 
		J/AJ/136/2136	83.711	-5.216	801.500	1,094.600			HST	<input type="button" value="Download"/> <input type="button" value="Search"/> <input type="button" value="Header"/> 
	OMC2-FIR4	J/A+A/605/A57	83.862	-5.166	100,000.0000	10,000,000.0000			IRAM/NOEMA	<input type="button" value="Download"/> <input type="button" value="Search"/> <input type="button" value="Header"/> 
	OMC2-FIR4	J/A+A/605/A57	83.862	-5.166	100,000.0000	10,000,000.0000			IRAM/NOEMA	<input type="button" value="Download"/> <input type="button" value="Search"/> <input type="button" value="Header"/> 

Associated data : indexation, metadata

Indexation of the associated data

Improving the associated data visibility with indexation and meta-data based on the ObsCore Data model (VO).

Critical metadata

- **Position RA, DEC (WCS mandatory)**
 - **Spectral range, time of observation**
 - **Target name**
 - **Instrument / Facility**
- FITS standard => metadata may exist, but:
 - **non-unique, ambiguous keywords**
 - **Can be inaccurate (tel positions, spectral coverage)**
- => Mapping supervised by authors and/or CDS documentalists

Associated data : mapping by authors

Tentative metadata is generated automatically, to be completed/corrected by author upon submission

Add new document(s) G12_Y1_AN1_235.fit

Data visibility:

△ Improve the impact of the spectra

Please take time to complete the following forms to improve the data visibility (click on +).

Green indicates a good visibility of your data

CDSD Portal Simbad VizieR Aladin X-Match Other Help

VizieR upload catalogue

You are logged as landais [report](#)

Upload tabular data Fill the README Upload Spectra (optional) Upload Images (optional) Terminate

You can upload associated data as **spectrum/time-series** or **images** in VizieR.

FITS is the most adapted format today. For these documents, a dedicated database indexes Spectra and images and provides them to the outside.

These documents need descriptions: the VizieR engine will extract some metadata in their that you can update or change.

In this web page you will upload your **Spectra/time-serie** in FITS format.

Upload your spectra

You have some spectra

! Only FITS format are accepted! Please, upload documents in an other format later.

You can upload your documents one by one by describing them **independently**
OR if you have documents with **similar header** you can upload a **collection** (an archive in tar, zip format) and put a common descript

Add new document(s) No file selected. which is ???

[Archive spectrum/J_apj_703_894_collection0/*\(111 files\)](#)

[Fill the README](#) [Upload Images \(optional\)](#)

<https://cdsarc.unistra.fr/vizier.submit/>

△ File spectrum/G12_Y1_AN1_235.fit spectral not set! (11 item(s) filled)

Force my mapping

Target name Assigned by Keyword Value: G

Right ascension ICRS Assigned by Keyword Value: 174.10071

Declination Assigned by Keyword Value: 0.65891

Field of view (deg)

Region

Spatial resolution (arcsec)

Begin time Assigned by Keyword Value: 54526.0

End time Computed value Value: 54526.041666666664

Exposure time Assigned by Keyword Value: 3600.

Time resolution (second)

Choose Band

△ Spectral min Spec. Coord. Assigned by Keyword Value: 3.7277910000000005E-7

△ Spectral max Assigned by Keyword Value: 8.856721E-7

Spectral resolution

Associated data : FITS validator

FITS Validator

This service is an add-on of the [VizieR upload service](#) based on the [Saada](#) engine. It establishes the compatibility of a FITS resource (spectra/image) with the [ObsCore](#) Data Model of the Virtual Observatory.



Understanding the validation

The validation service makes a mapping between FITS header and the ObsCore DataModel using [standardized FITS keywords](#) and the most popular [WCS](#) projections (including the TNX WCS (IRAF)). Other WCS projections or incomplete WCS header are not resolved by the service.

Test your FITS spectrum/image

Put Fits

Choose file G12_Y1_AN1_235.fit

Test

HDU 0

Fits detection

Extension (hdu) default

Instrument AAOMEGA-2dF (INSTRUME)

WCS report:

Position Keywords

Facility AAT (TELESCOP)

No WCS spatial axis found Keyword CTYPE2 not found

Spectral Keywords

Time 54526.0 (DATE-OBS) 54526.041666666664

No WCSDIM kw: not an Iraf spectra

No regular WCS spectral axis found: Keyword CTYPE2 not found

No time projection found in wcs

No WCS polarization axis found Keyword CTYPE2 not found

Fits Header description

HDU 0

Show 25 entries

Search:

Card	Description	Value
ALT	Altitude at start of observation in deg	50.88063
ALTITUDE	Telescope height above sea level in m	1164.
BITPIX	number of bits per data pixel	-32
BSCALE	True_value = BSCALE * FITS_value + BZERO	1.
BZERO	True_value = BSCALE * FITS_value + BZERO	0.
CATAID	ID of GAMA target in InputCatA (-1 for calibrat	6808
CD1_1	WCS transformation matrix element	1.035938131186

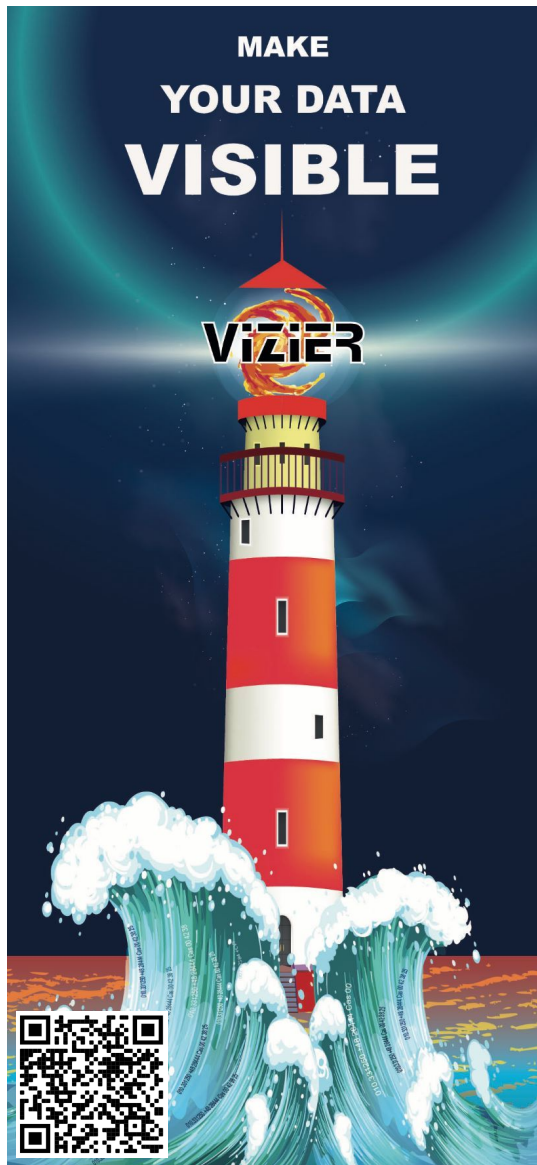
Obscore Mapping [Edit the mapping](#)

This is the result of the mapping between ObsCore and your FITS file. You can edit it and improve the mapping or save the mapping into a simple text file.

Name	Value	Explain
target_name	G	TARGET (BY_KEYWORD)
s_ra	174.10071	RA (BY_KEYWORD)
s_dec	0.65891	DEC (BY_KEYWORD)
system	ICRS	ICRS (BY_VALUE)
s_fov		✗NOT_SET
s_region		✗NOT_SET
s_resolution		✗NOT_SET
DATE-OBS	.0	DATE-OBS (BY_KEYWORD)
54526.041666666664	54526.041666666664	54526.041666666664 (BY_VALUE)

<https://cdsarc.unistra.fr/vizier.submit/fitsvalidator.html>

Summary



Publishing data / associated data in VizieR

- Is an important step in enabling open data / open science / FAIR paradigm
- Associated data is full of promise but is a huge challenge because of data heterogeneity
- CDS has developed:
 - Improved submission interface for your catalogs
 - new, dedicated tools for indexing and accessing associated data, still evolving
- But this is still the beginning:
 - Proper indexation is the responsibility of authors and documentalists working together
 - authors please help by doing your part, reward = increased impact of your research! (VizieR > 500,000 queries/day)