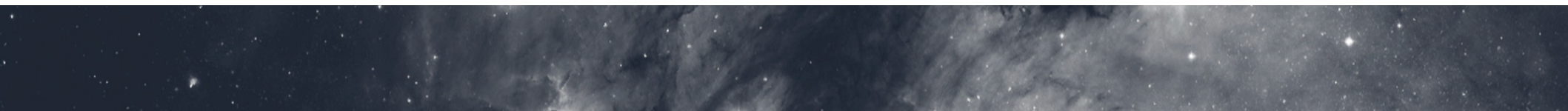




Datalink

Ivan Brossard, Gilles Landais

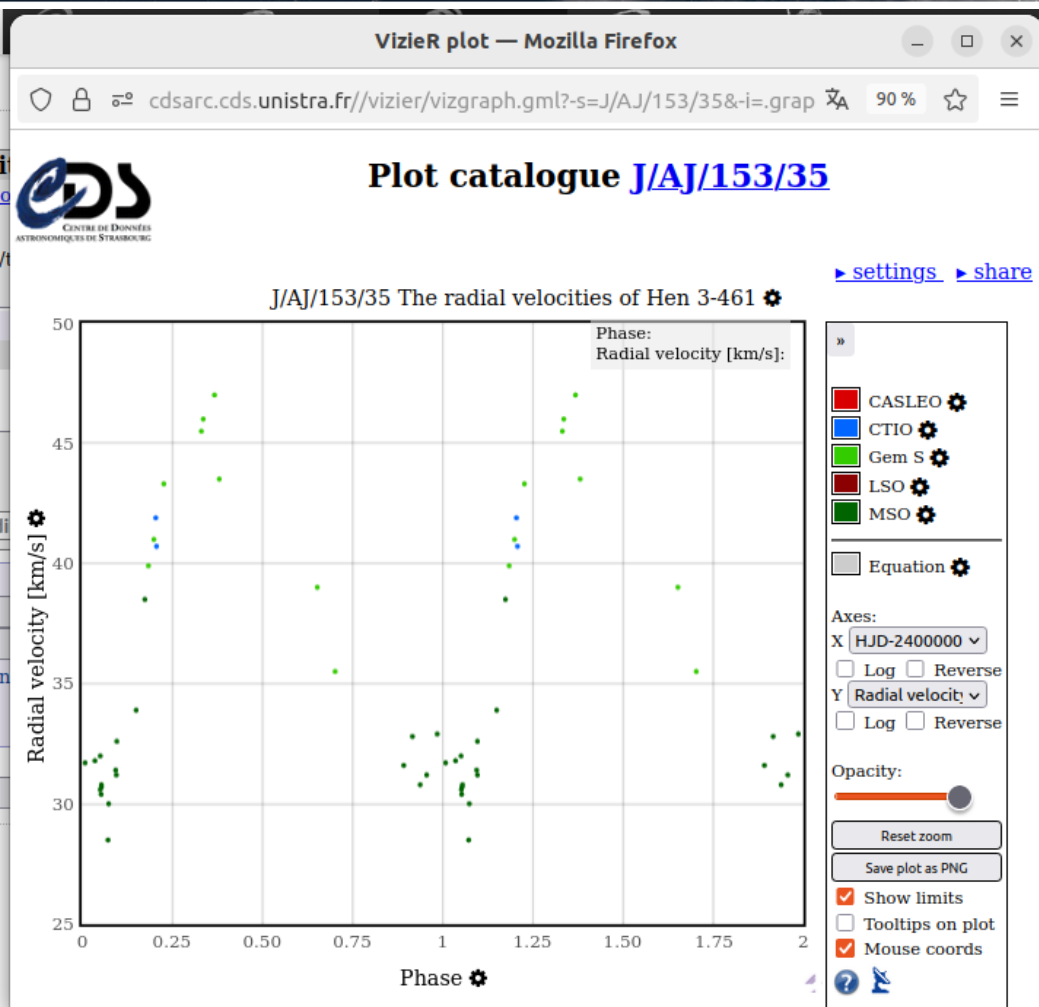


□ When retrieving data from VizieR

J/AJ/153/35/table1:

<u>Name</u> △▽	<u>Nrv</u> △▽	<u>Vmag</u> <u>mag</u> △▽	<u>Kmag</u> <u>mag</u> △▽	<u>f_</u> △▽	<u>H-K</u> <u>mag</u> △▽	<u>f_</u> △▽	<u>SpT</u> △▽	<u>Per</u> <u>d</u> △▽	<u>M92</u> △▽	<u>B00</u> △▽	<u>VP</u> △▽	<u>Simbad</u> △▽	<u>RA</u> <u>deg</u> △▽	<u>DE</u> <u>deg</u> △▽
Hen 3-461	30	12.26	3.84		0.37		M7	2271.0	M92	B00	VP	Simbad	159.78625	-51.40347
SY Mus	58	10.67	4.70		0.30		M4.5	624.4	M92	B00	VP	Simbad	173.04169	-65.41988
Hen 3-828	18	14.30	7.17		0.38		M6	660.5	M92	B00	VP	Simbad	192.74207	-57.84625
AR Pav	51	11.14	7.10	c	0.28	c	M5	603.9	M92	B00	VP	Simbad	275.11617	-66.07859

When retrieving data from VizieR



			VP	Simbad	RA deg	DE deg
1.0	M92	B00	VP	Simbad	159.78625	-51.40347
4.4	M92	B00	VP	Simbad	173.04169	-65.41988
0.5	M92	B00	VP	Simbad	192.74207	-57.84625
13.9	M92	B00	VP	Simbad	275.11617	-66.07859

Basic data :

WRAY 15-1022 -- Symbiotic Star

Other object types: ?

ICRS coord. ($ep=J2000$) :

Em* (Hen,SS73,...), SB* (2004A&A,SBC9)

FK4 coord. ($ep=B1950$ $eq=1950$) :

12 50 58.0841127048 -57 50 46.4891089;

Gal coord. ($ep=J2000$) :

12 48 01.7022180774 -57 34 27.17277016

Proper motions mas/yr :

302.8691722539075 +05.0254433622651 [

Radial velocity / Redshift / cz :

-5.638 -1.434 [0.023 0.027 90] A 2020;

Parallaxes (mas):

V(km/s) -14.87 [0.31] / z(-) -0.000051

Spectral type:

D 2017AJ...153...35F

Fluxes (6) :

0.1794 [0.0285] A 2020yCat.1350...0G

M6 D 1980MNRAS.192..521A

B 13.5 [~] E ~

V 14.30 [~] D 1992A&AS...93..383M

G 12.631103 [0.003738] C 2020yCat.135

J 8.536 [0.021] C 2003yCat.2246...0C

H 7.53 [0.03] C 2003yCat.2246...0C

K 7.098 [0.024] C 2003yCat.2246...0C

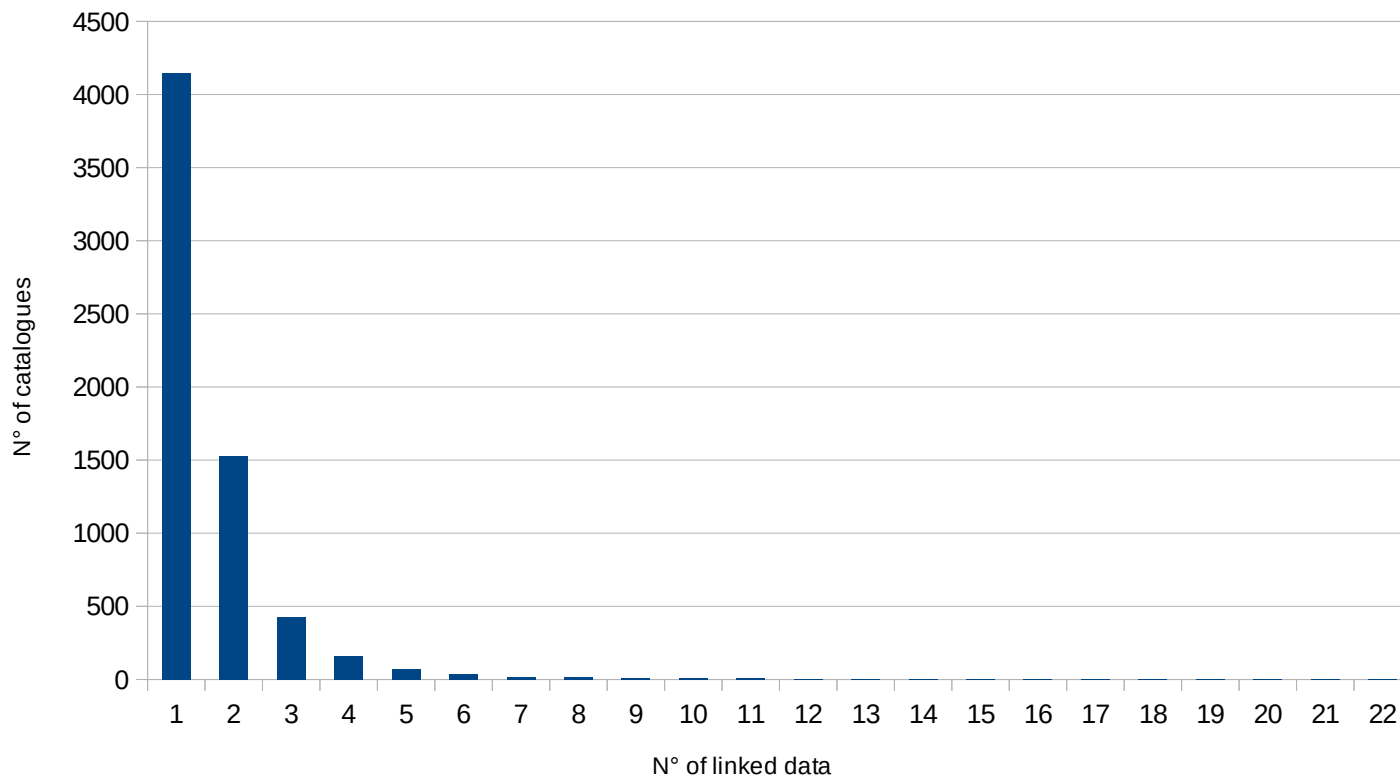
□ When retrieving data from VizieR

J/AJ/153/35/table1:

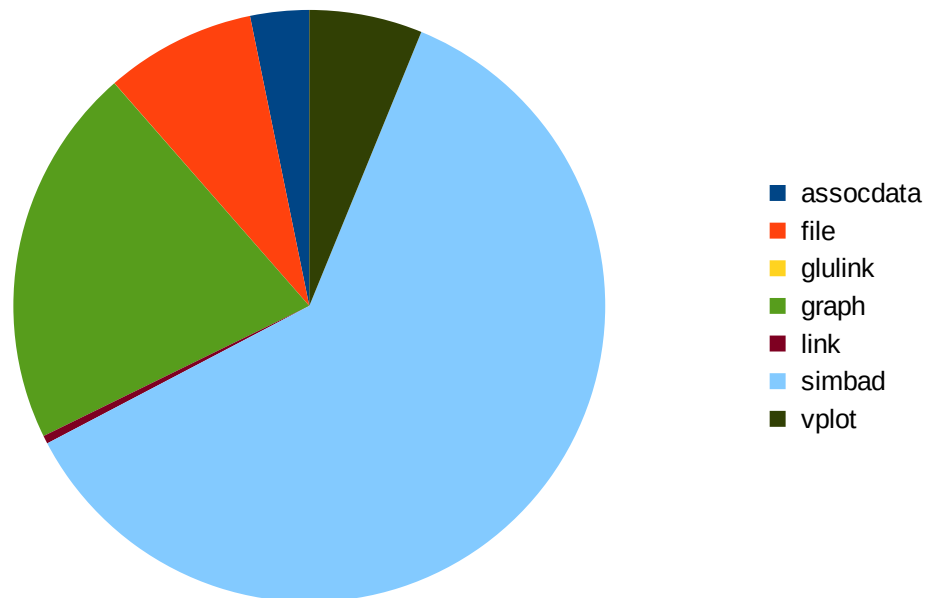
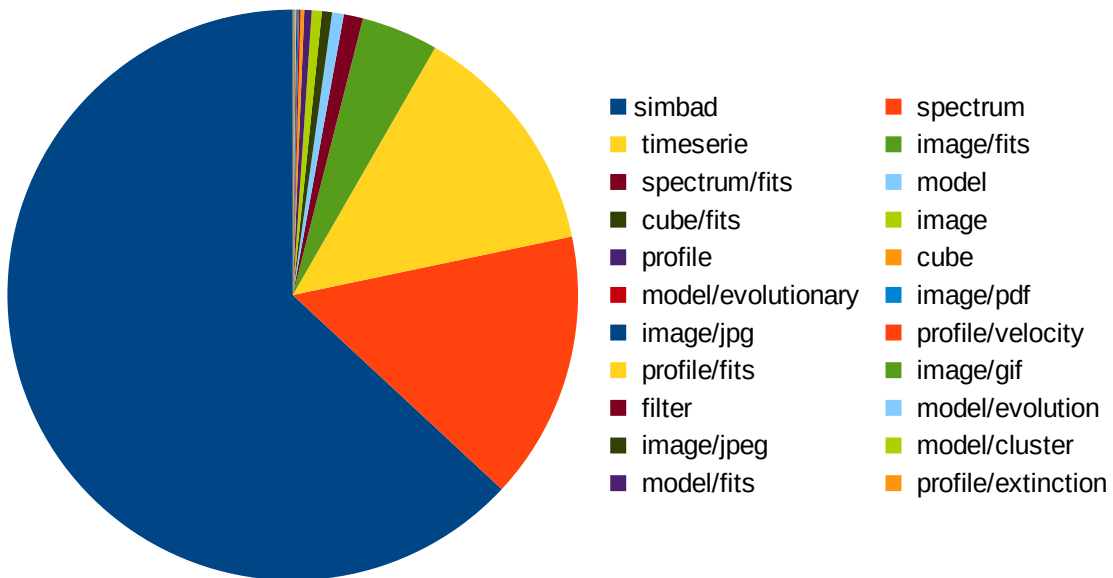
<u>Name</u>	<u>Nrv</u>	<u>Vmag</u> <u>mag</u>	<u>Kmag</u> <u>mag</u>	<u>f_</u>	<u>H-K</u> <u>mag</u>	<u>f_</u>	<u>SpT</u>	<u>Per</u> <u>d</u>	<u>M92</u>	<u>B00</u>	<u>VP</u>	<u>Simbad</u>	<u>RA</u> <u>deg</u>	<u>DE</u> <u>deg</u>
Hen 3-461	30	12.26	3.84		0.37		M7	2271.0	M92	B00	VP	Simbad	159.78625	-51.40347
SY Mus	58	10.67	4.70		0.30		M4.5	624.4	M92	B00	VP	Simbad	173.04169	-65.41988
Hen 3-828	18	14.30	7.17		0.38		M6	660.5	M92	B00	VP	Simbad	192.74207	-57.84625
AR Pav	51	11.14	7.10	c	0.28	c	M5	603.9	M92	B00	VP	Simbad	275.11617	-66.07859

Name	Nrv	Vmag mag	Kmag mag	f_Kmag	H-K mag	f_H-K	SpT	Per d	M92	B00	VP	Simbad	RA deg	DE deg
str9	int16	float32	float32	str1	float32	str1	str4	float32	str3	str3	str2	str6	float64	float64
Hen 3-461	30	12.26	3.84		0.37		M7	2271.0	M92	B00	VP	Simbad	159.78625	-51.40347
SY Mus	58	10.67	4.70		0.30		M4.5	624.4	M92	B00	VP	Simbad	173.04169	-65.41988
Hen 3-828	18	14.30	7.17		0.38		M6	660.5	M92	B00	VP	Simbad	192.74207	-57.84625
AR Pav	51	11.14	7.10	c	0.28	c	M5	603.9	M92	B00	VP	Simbad	275.11617	-66.07859

□ Not a rare issue



□ Not a rare issue



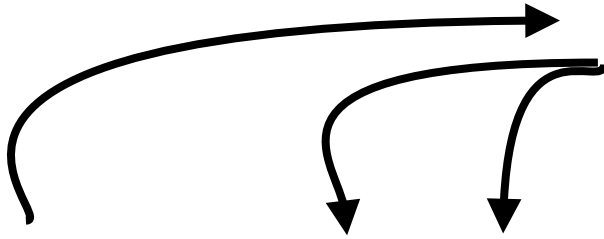
□ A tool fitted to the issue



- What is Datalink ?
 - An VO tool designed to use metadata to access data ;
 - Authored by Patrick Dowler, François Bonnarel, Laurent Michel, Markus Demleitner, Mark Taylor ;
 - <https://www.ivoa.net/documents/DataLink/20231215/REC-DataLink-1.1.html>



□ A tool fitted to the issue



<u>recno</u>	<u>Name</u>	<u>VP</u>	<u>Simbad</u>
1	Hen 3-461	VP	Simbad
2	SY Mus	VP	Simbad
3	Hen 3-828	VP	Simbad
4	AR Pav	VP	Simbad

name	description	field required	value required
ID	Input identifier	yes	yes
access_url	link to data or service	yes	
service_def	reference to a service descriptor resource	yes	one only
error_message	error if an access_url cannot be created	yes	
description	human-readable text describing this link	yes	no
semantics	Term from a controlled vocabulary describing the link	yes	yes
content_type	mime-type of the content the link returns	yes	no
content_length	size of the download the link returns	yes	no
content_qualifier	nature of the content the link returns	no	no
local_semantics	An identifier that allows clients to associate rows from different datalink documents on the same service with each other.	no	no
link_auth	use of the link requires authentication	no	no
link_authorized	caller is authorized to use the link	no	no

□ What does it look like ?



Datalink service description :

```
—<RESOURCE name="datalink" type="meta" utype="ad hoc:service">
  <DESCRIPTION>Datalink service</DESCRIPTION>
  <PARAM arraysize="*" datatype="char" name="standardID" value="ivo://ivoa.net/std/datalink#links-1.1"/>
  <PARAM arraysize="*" datatype="char" name="accessURL" value="http://vizier.cds.unistra.fr/viz-bin/links"/>
—<GROUP name="inputParams">
  <PARAM name="ID" datatype="char" arraysize="*" value="" ref="t1_c0"/>
</GROUP>
  <PARAM arraysize="*" datatype="char" name="contentType" value="application/x-votable+xml;content=datalink"/>
</RESOURCE>
```

New ivoid column :

```
—<FIELD ID="t1_c0" name="_ivoid" ucd="meta.id" datatype="char" arraysize="128">
  <!-- ucd="?" -->
—<DESCRIPTION>
  Link(s) to associated data (added by CDS, not part of original data)
</DESCRIPTION>
</FIELD>
```

```
—<TABLEDATA>
—<TR>
  <TD>ivo://CDS.VizieR/J/AJ/153/35?table1__recno=1</TD>
  <TD>0.636777</TD>
  <TD>1</TD>
  <TD>Hen 3-461</TD>
  <TD>30</TD>
  <TD>12.26</TD>
  <TD>3.84</TD>
  <TD/>
  <TD>0.37</TD>
  <TD/>
  <TD>M7</TD>
  <TD>2271.0</TD>
  <TD>M92</TD>
  <TD>B00</TD>
  <TD>VP</TD>
  <TD>Simbad</TD>
  <TD>159.78625</TD>
  <TD>-51.40347</TD>
</TR>
</TABLEDATA>
```

□ What does it look like ?



Alternatively, new datalink column :

```
-----  
-<FIELD ID="t1_c0" name="_links" ucd="meta.ref.url" datatype="char" arraysize="128">  
  <!-- ucd="?" -->  
  -<DESCRIPTION>  
    Link(s) to associated data (added by CDS, not part of original data)  
  </DESCRIPTION>  
  <LINK content-type="application/x-votable+xml;content=Datalink" title="Datalink"> </LINK>  
-</FIELD>  
  
-<TR>  
  -<TD>  
    http://vizier.cds.unistra.fr/viz-bin/links?ID=ivo://CDS.VizieR/J/AJ/153/35?table1__recno=1  
  </TD>  
  <TD>1</TD>  
  <TD>Hen 3-461</TD>  
  <TD>30</TD>  
  <TD>12.26</TD>  
  <TD>3.84</TD>  
  <TD/>  
  <TD>0.37</TD>  
  <TD/>  
  <TD>M7</TD>  
  <TD>2271.0</TD>  
  <TD>M92</TD>  
  <TD>B00</TD>  
  <TD>VP</TD>  
  <TD>Simbad</TD>  
  <TD>159.78625</TD>  
  <TD>-51.40347</TD>  
-</TR>
```

□ What does it look like ?



```
--<VOTABLE version="1.4">
-<RESOURCE type="results">
  -<TABLE>
    <FIELD name="ID" datatype="char" arraysize="*" ucd="meta.id;meta.main"/>
    <FIELD name="access_url" datatype="char" arraysize="*" ucd="meta.ref.url"/>
    <FIELD name="service_def" datatype="char" arraysize="*" ucd="meta.ref"/>
    <FIELD name="error_message" datatype="char" arraysize="*" ucd="meta.code.error"/>
    <FIELD name="semantics" datatype="char" arraysize="*" ucd="meta.code"/>
    <FIELD name="description" datatype="char" arraysize="*" ucd="meta.note"/>
    <FIELD name="content_type" datatype="char" arraysize="*" ucd="meta.code.mime"/>
    <FIELD name="content_qualifier" datatype="char" arraysize="*" ucd="meta.code.mime"/>
  -<DATA>
    -<TABLEDATA>
      -<TR>
        <TD>ivo://CDS.VizieR/J/AJ/153/35?table1__recno=1</TD>
      -<TD>
        http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/AJ/153/35&-i=.graph_sql&Name=Hen%203-461&Per=2271.0&--output=votable
      </TD>
      <TD/>
      <TD/>
      <TD>auxiliary</TD>
      <TD>Velocity Plot (timeserie) from J/AJ/153/35</TD>
      <TD>application/x-votable+xml?content=timeserie</TD>
      <TD>timeserie</TD>
    </TR>
    -<TR>
      <TD>ivo://CDS.VizieR/J/AJ/153/35?table1__recno=1</TD>
    -<TD>
      https://simbad.cds.unistra.fr/simbad/sim-basic?Ident=Hen%25203-461
    </TD>
    <TD/>
    <TD/>
    <TD>counterpart</TD>
    <TD>Simbad column added by the CDS () from J/AJ/153/35</TD>
    <TD>text/html</TD>
    <TD>measurement</TD>
  </TR>
</TABLEDATA>
</DATA>
</TABLE>
```

□ Description Data



```
-<VOTABLE version="1.4">  
  -<RESOURCE type="results">  
    -<TABLE>  
      <FIELD name="ID" datatype="char" arraysize="*" ucd="meta.id;meta.main"/>  
      <FIELD name="access_url" datatype="char" arraysize="*" ucd="meta.ref.url"/>  
      <FIELD name="service_def" datatype="char" arraysize="*" ucd="meta.ref"/>  
      <FIELD name="error_message" datatype="char" arraysize="*" ucd="meta.code.error"/>  
      <FIELD name="semantics" datatype="char" arraysize="*" ucd="meta.code"/>  
      <FIELD name="description" datatype="char" arraysize="*" ucd="meta.note"/>  
      <FIELD name="content_type" datatype="char" arraysize="*" ucd="meta.code.mime"/>  
      <FIELD name="content_qualifier" datatype="char" arraysize="*" ucd="meta.code.mime"/>
```

□ “Actual” Data



```
<TD>ivo://CDS.VizieR/J/AJ/153/35?table1__recno=1</TD>
```

```
-<TD>
```

```
  http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/AJ/153/35&-i=.graph_sql&Name=Hen%203-461&Per=2271.0&--output=votable
```

```
</TD>
```

```
<TD/>
```

```
<TD/>
```

```
<TD>auxiliary</TD>
```

```
<TD>Velocity Plot (timeserie) from J/AJ/153/35</TD>
```

```
<TD>application/x-votable+xml?content=timeserie</TD>
```

```
<TD>timeserie</TD>
```

□ “Actual” Data



```
<TD>ivo://CDS.VizieR/J/AJ/153/35?table1__recno=1</TD>
```

```
-<TD>
```

```
http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/AJ/153/35&-i=.graph_sql&Name=Hen%203-461&Per=2271.0&--output=votable
```

```
</TD>
```

```
<TD/>
```

```
<TD/>
```

```
<TD>ivo://CDS.VizieR/J/AJ/153/35?table1__recno=1</TD>
```

```
-<TD>
```

```
http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/AJ/153/35&-i=
```

```
</TD>
```

```
<TD/>
```

```
<TD/>
```

```
<TD>auxiliary</TD>
```

```
<TD>Velocity Plot (timeserie) from J/AJ/153/35</TD>
```

```
<TD>application/x-votable+xml?content=timeserie</TD>
```

```
<TD>timeserie</TD>
```

□ Drilling down...



- Following the `access_url`, we can get the data which makes up the plot...

```
-<TABLE name="MSO" id="MSO">
  <FIELD name="HJD-2400000 [d]" ID="HJD-2400000 [d]" datatype="float"/>
  <FIELD name="Radial velocity [km/s]" ID="Radial_velocity [km/s]" datatype="float"/>
-<DATA>
-<TABLEDATA>
  -<TR>
    <TD>51988.096 </TD>
    <TD> 31.6</TD>
  </TR>
  -<TR>
    <TD>52043.960 </TD>
    <TD> 32.8</TD>
  </TR>
  -<TR>
    <TD>52092.919 </TD>
    <TD> 30.8</TD>
  </TR>
  -<TR>
    <TD>52133.887 </TD>
```

□ Drilling down...



- ...or access the linked simbad page

Query : Hen3-461

Basic data :

WRAY 15-619 -- Symbiotic Star

Other object types: Sy* (), MIR (AKARI,WISEA,...), SB* (2004A&A,SBC9), Em* (Hen,WRAY), PN (PK), LP? (2022yCat), * (Gaia), NIR (2MASS), IR (IRAS)

ICRS coord. ($ep=J2000$) : 10 39 08.6786794704 -51 24 12.651866460 (Optical) [0.0412 0.0396 90] A 2020yCat.1350....0G

FK5 coord. ($ep=J2000$ $eq=2000$) : 10 39 08.6815032465 -51 24 12.667281930 [0.0412 0.0396 90]

FK4 coord. ($ep=B1950$ $eq=1950$) : 10 37 04.1432900507 -51 08 33.657188917 [0.0412 0.0396 90]

Gal coord. ($ep=J2000$) : 282.9046289183628 +06.2499921378949 [0.0412 0.0396 90]

Proper motions mas/yr : -11.193 3.065 [0.059 0.052 90] A 2020yCat.1350....0G

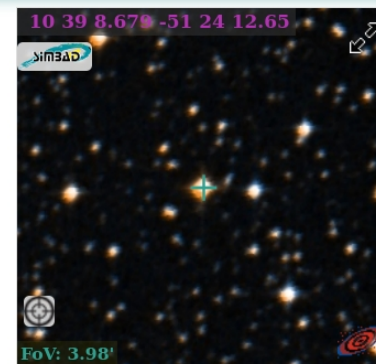
Radial velocity / Redshift / cz : V(km/s) 43.29 [1.04] / z(spectroscopic) 0.000144 [0.000003] / cz 43.29 [1.04]
(Opt) B 2022yCat.1355....0G

Parallaxes (mas): 0.6782 [0.0494] A 2020yCat.1350....0G

Spectral type: M7 D 1993yCat.3170....0M

Fluxes (5) : V 12.26 [-] D 1992A&AS...93..383M
G 9.608948 [0.005816] C 2020yCat.1350....0G
J 5.235 [0.024] C 2003yCat.2246....0C
H 4.191 [0.232] D 2003yCat.2246....0C
K 3.864 [0.274] D 2003yCat.2246....0C

SIMBAD within



All (CDSPortal)

Send to

Photometry within

Example



[J/ApJS/240/16/dr1lcs](#)
Post annotation

Exoplanets in the Antarctic sky. I. AST3-II DR1 (Zhang+, 2019)
AST3-II DR1 detrended light curves list; table added by CDS (27798 rows)

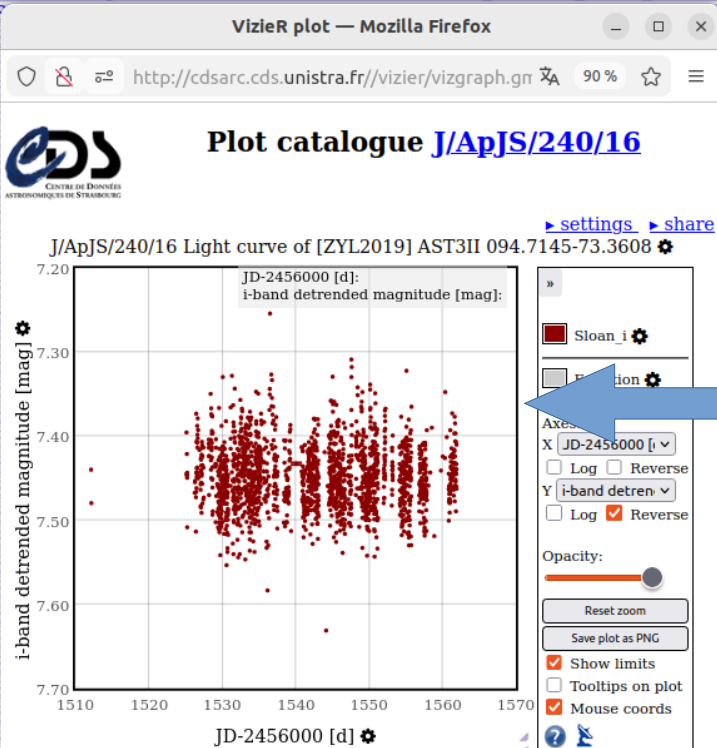
[2019ApJS...240...16Z](#) Re

[start Aladin Lite](#)

[plot the output](#)

[query using TAP/SOL](#)

Full	RAJ2000 "h:m:s"	DEJ2000 "d:m:s"	Field	Var	imag mag	RAJ2000 deg	DEJ2000 deg	FileName	LC
1	06 18 51.480	-73 21 38.88	Tess004	0	7.68	094.7145	-73.3608	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_07.68_094.7145-73.3608_001866.dat	LC
2	06 14 41.928	-73 37 35.40	Tess004	0	7.81	093.6747	-73.6265	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_07.81_093.6747-73.6265_001881.dat	LC
3	06 20 00.000	-72 45 06.12	Tess004	0	8.02	095.0000	-72.7517	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.02_095.0000-72.7517_001875.dat	LC
4	06 05 56.712	-72 38 53.16	Tess004	0	8.12	091.4863	-72.6481	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.12_091.4863-72.6481_001881.dat	LC
5	06 09 11.544	-73 35 52.08	Tess004	0	8.18	092.2981	-73.5978	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.18_092.2981-73.5978_001882.dat	LC
6	06 10 42.576	-73 00 46.80	Tess004	0	8.21	092.6774	-73.0130	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.21_092.6774-73.0130_001882.dat	LC
7	06 15 54.240	-73 12 59.04	Tess004	0	8.27	093.9760	-73.2164	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.27_093.9760-73.2164_001881.dat	LC
8	06 15 12.120	-73 27 09.72	Tess004	0	8.42	093.8005	-73.4527	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.42_093.8005-73.4527_001880.dat	LC
9	06 19 36.360	-73 05 13.56	Tess004	0	8.44	094.9015	-73.0871	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.44_094.9015-73.0871_001880.dat	LC
10	06 14 57.768	-72 29 48.48	Tess004	0	8.51	093.7407	-72.4968	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.51_093.7407-72.4968_001881.dat	LC
11	06 08 35.256	-74 23 36.24	Tess004	0	8.70	092.1469	-74.3934	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.70_092.1469-74.3934_001882.dat	LC
12	06 17 27.888	-72 41 50.28	Tess004	0	8.79	094.3662	-72.6973	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.79_094.3662-72.6973_001881.dat	LC
13	06 11 13.872	-73 35 55.68	Tess004	0	8.83	092.8078	-73.5988	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.83_092.8078-73.5988_001882.dat	LC
14	06 12 21.192	-72 48 27.36	Tess004	0	8.91	093.0883	-72.8076	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.91_093.0883-72.8076_001882.dat	LC
15	06 05 54.432	-73 58 52.32	Tess004	0	8.97	091.4768	-73.9812	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_08.97_091.4768-73.9812_001879.dat	LC
16	06 15 38.784	-73 01 58.08	Tess004	0	9.08	093.9116	-73.0328	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.08_093.9116-73.0328_001881.dat	LC
17	06 08 56.592	-72 46 31.08	Tess004	0	9.15	092.2358	-72.7753	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.15_092.2358-72.7753_001882.dat	LC
18	06 20 10.776	-73 48 24.12	Tess004	0	9.16	095.0449	-73.8067	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.16_095.0449-73.8067_000770.dat	LC
19	06 22 35.424	-74 10 52.32	Tess004	0	9.30	095.6476	-74.1812	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.30_095.6476-74.1812_001881.dat	LC
20	06 17 37.968	-73 12 31.32	Tess004	0	9.36	094.4082	-73.2087	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.36_094.4082-73.2087_001881.dat	LC
21	06 18 50.568	-73 47 36.96	Tess004	0	9.37	094.7107	-73.7936	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.37_094.7107-73.7936_001881.dat	LC
22	06 16 46.272	-73 02 56.04	Tess004	0	9.39	094.1928	-73.0489	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.39_094.1928-73.0489_001881.dat	LC
23	06 16 58.704	-72 39 42.48	Tess004	0	9.41	094.2446	-72.6618	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.41_094.2446-72.6618_001881.dat	LC
24	06 05 46.776	-73 42 03.24	Tess004	0	9.46	091.4449	-73.7009	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.46_091.4449-73.7009_001880.dat	LC
25	06 21 36.120	-71 45 47.88	Tess004	0	9.46	095.4005	-71.7633	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.46_095.4005-71.7633_000667.dat	LC
26	06 21 55.752	-74 24 20.16	Tess004	0	9.46	095.4823	-74.4056	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.46_095.4823-74.4056_001025.dat	LC
27	06 15 13.872	-73 50 11.76	Tess004	0	9.55	093.8078	-73.8366	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.55_093.8078-73.8366_001881.dat	LC
28	06 04 33.504	-73 20 49.92	Tess004	0	9.58	091.1396	-73.3472	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.58_091.1396-73.3472_001881.dat	LC
29	06 15 21.480	-73 24 57.24	Tess004	0	9.59	093.8395	-73.4159	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.59_093.8395-73.4159_001881.dat	LC
30	06 06 24.288	-72 43 08.04	Tess004	0	9.63	091.6012	-72.7189	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.63_091.6012-72.7189_001881.dat	LC
31	06 12 53.064	-72 58 22.80	Tess004	0	9.65	092.2211	-72.9730	J/ApJS/240/16/lightcurves/detrended/Tess004/AST3II_Tess004_09.65_092.2211-72.9730_001882.dat	LC



I want to
access
this !

Access points



I can use TOPCAT:

TOPCAT

File Views Graphics Joins Windows VO Interop Help

Table List

16: dr1lcs&RA=90&DEC

Current Table Properties

Label: dr1lcs&RA=90&DEC=-70&SR=0.5

Location: <http://vizier.cds.unistra.fr/viz-bin/conesearchdl?-source=J/ApJS/240/16/dr1lcs&RA=90&DEC=-70&SR=0.5>

Name: J/ApJS/240/16/dr1lcs

Rows: 61

Columns: 12

Sort Order: ↑

Row Subset: All

Activation Actions: 1 / 9

Window Rows Help

TOPCAT(16): Table Browser

Table Browser for 16: dr1lcs&RA=90&DEC=-70&SR=0.5

	_ivoid	_r	recno	Field	Var	imag
44	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 48654	15127	Tess009	0	14, 07
45	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 45679	15175	Tess009	0	14, 12
46	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 49328	15176	Tess009	0	14, 12
47	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 44134	15185	Tess009	0	14, 13
48	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 49998	15292	Tess009	0	14, 24
49	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 46539	15325	Tess009	0	14, 27
50	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 46141	15345	Tess009	0	14, 29
51	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 31388	15421	Tess009	0	14, 36
52	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 34133	15508	Tess009	0	14, 44
53	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	0, 47621	15523	Tess009	0	14, 45

SAMP

Messages:

223 / 3898 M

□ Access points



Views Graphics Joins Windows VO Interop Help

Table List Current Table Properties

TOPCAT(16): Activation Actions

Window Actions Help

Activation Actions for 16: dr1lcs&RA=90&DEC=-70&SR=0.5

Actions

- ☒ Use Sky Coordinates
- ☒ Invoke Service
- ☐ Send Sky Coordinate
- ☐ Display HiPS cutout
- ☐ Send HiPS cutout
- ☐ Display image

Description

Invoke a service defined by a ServiceDescriptor attached to the table

Configuration

Action: View DataLink Table

Name: datalink

Description: Datalink service

Base URL: <http://vizier.cds.unistra.fr/viz-bin/links>

229 / 3898 M

□ Access points



TOPCAT(16): Table Browser

Window Rows Help

Table Browser for 16: dr1lcs&RA=90&DEC=-70&

	ivoid	
44	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
45	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
46	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
47	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
48	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
49	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
50	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
51	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
52	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
53	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
54	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
55	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
56	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
57	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
58	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
59	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
60	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..
61	ivo://CDS.VizieR/J/ApJS/240/16?dr1lcs	recno=..

Total: 61 Visible: 61 Selected: 1

TOPCAT(16): Invoke Service - View Datalink Table

DataLink Table

	ID	access_url	service_def	error_message	content
1	ivo://CDS.VizieR/J/ApJS/240/16?d...	https://cdsarc.cds.unistra.fr/viz...			timeseri
2	ml?cont... ivo://CDS.VizieR/J/ApJS/240/16?d...	http://cdsarc.cds.unistra.fr/viz-...			timeseri

Row Link Type
Fixed Access URL

Row Detail

Access URL: [http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/ApJS/240/16&-i=.graph_sql&ID=FileName\\$_3&file=I](http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/ApJS/240/16&-i=.graph_sql&ID=FileName$_3&file=I)

Content Type: application/x-votable+xml?content=timeserie; timeserie

Content Length:

Description: Interactive light curve plot for this source (timeserie) from J/ApJS/240/16

Semantics: auxiliary

URL: [http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/ApJS/240/16&-i=.graph_sql&ID=FileName\\$_3&file=lightcurves/c](http://cdsarc.cds.unistra.fr/viz-bin/vizgraph?-s=J/ApJS/240/16&-i=.graph_sql&ID=FileName$_3&file=lightcurves/c)

Type: TABLE Guess ☒ Action: Load Tables ☐ Auto-Invoke

Result: OK Loaded table 17: AST3II_Tess009_14.07_091.3533-70.1552_001651.dat...

Access points



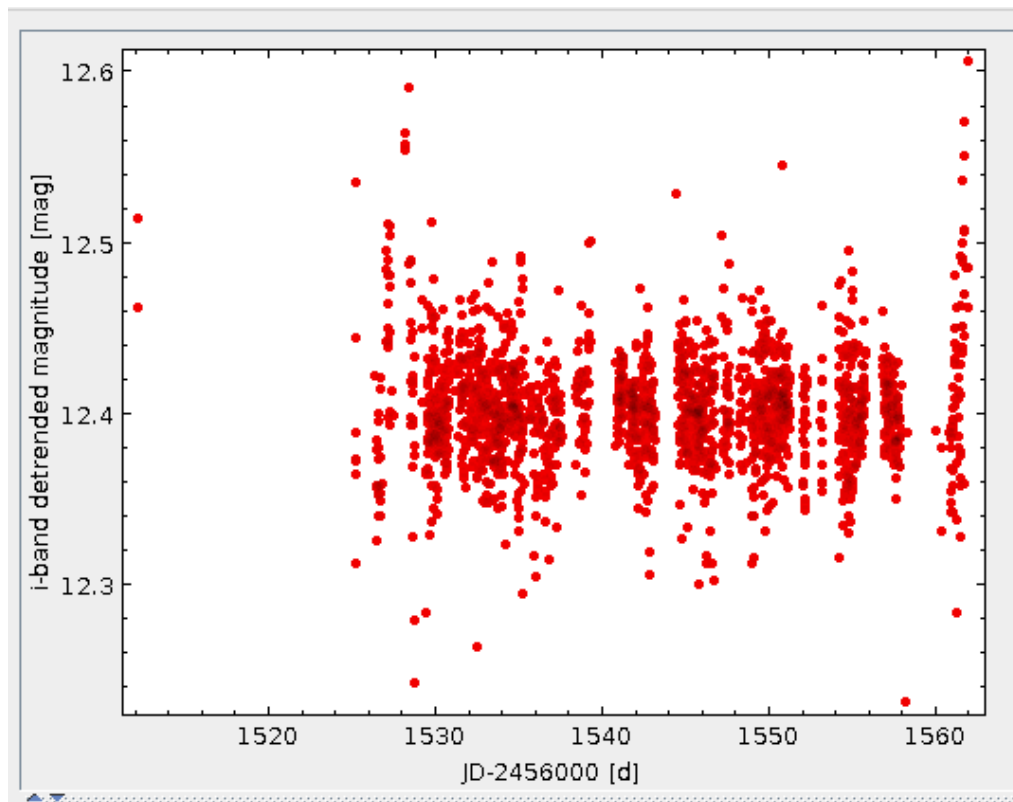
TOPCAT(19): Table Browser

Window Rows Help

Table Browser for 19: AST3II_Tess009_12.31_091.0437-70.1461_001834

	JD-2456000 [d]	i-band detrended magnitude [mag]	ERROR
1	1512,19	12,5138	0,0504
2	1512,2	12,4623	0,0483
3	1525,19	12,5349	0,0068
4	1525,2	12,3734	0,0072
5	1525,21	12,4437	0,0094
6	1525,22	12,3718	0,0066
7	1525,23	12,3119	0,0079
8	1525,24	12,3884	0,0079
9	1525,26	12,3637	0,0081
10	1526,32	12,4219	0,0114
11	1526,48	12,3579	0,0068
12	1526,5	12,3255	0,0102
13	1526,51	12,3787	0,0103
14	1526,52	12,3569	0,0099
15	1526,53	12,3839	0,0101
16	1526,55	12,3793	0,0093
17	1526,56	12,3733	0,009
18	1526,57	12,3951	0,0092
19	1526,58	12,3572	0,0094
20	1526,6	12,3403	0,0096
21	1526,61	12,3521	0,0096
22	1526,62	12,3996	0,0103
23	1526,63	12,3519	0,0104
24	1526,65	12,3581	0,0109
25	1526,66	12,3493	0,0113

Total: 1 807 Visible: 1 807 Selected: 0



□ Access points



```
from pyvo.dal import SCSResults
from astropy.io.votable import parse
import pyvo as vo
import matplotlib.pyplot as plt
```

Or I can use python:

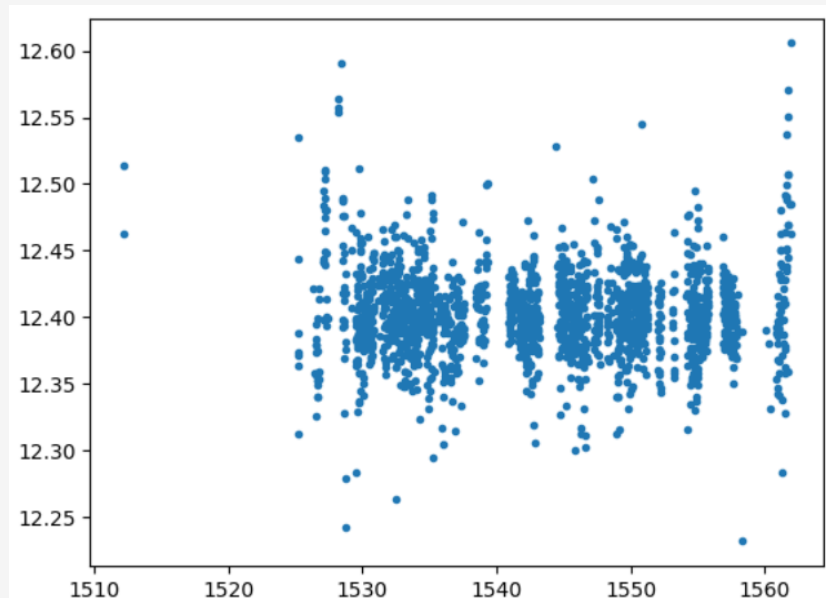
```
url="https://vizier.cds.unistra.fr/viz-bin/conesearchdl?-source=J/ApJS/240/16/dr1lcs&RA=90&DEC=-70&SR=0.4"
asu = parse(url)
resultset = SCSResults(asu)
```

```
dls = []
for rec in resultset:
    dls.append(rec.getdatalink())
```

```
dl = dls[0]
url = dl['access_url'][1]
t = parse(url)
```

```
tab = t.resources[0].tables[0].to_table()
```

```
c1 = tab.columns[0].name
c2 = tab.columns[1].name
plt.plot(tab[c1], tab[c2], linestyle='None', marker='.')
```



□ Access points



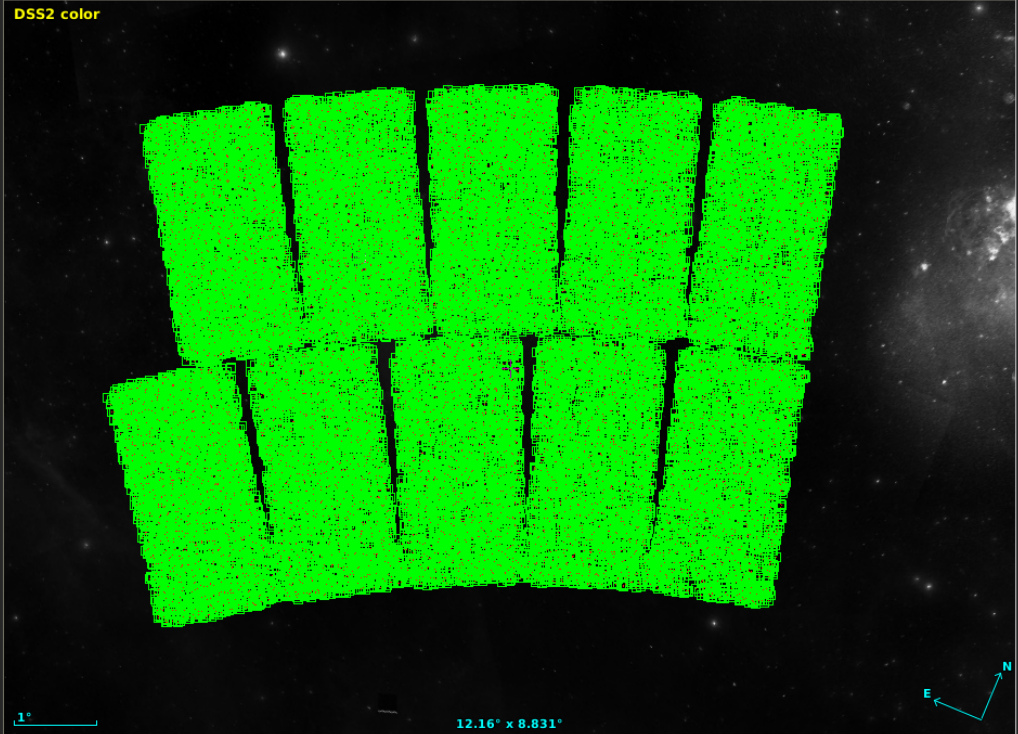
ALADIN

Or I can use Aladin:

Commande x Référentiel CRS Projection Aitoff

DSS PanSTARRS SDSS 2MASS GALEX Gaia Simbad NED +

DSS2 color



1° 12.16° x 8.831°

grilleexam: ligne maj nord hdr multivues unif.

links

	Field	Var	imag	RA[2000]	DE[2000]	FileName	APASS	LC	2M
Datalink	Tess013	0	15	111.6009	-68.8348	Tess013_15.00_1 APASS	LC	2M	
Datalink	Tess013	0	15	111.6397	-71.3169	Tess013_15.00_1 APASS	LC	2M	
Datalink	Tess013	0	15	111.6797	-70.4233	Tess013_15.00_1 APASS	LC	2M	
Datalink	Tess013	0	15	111.9613	-68.5906	Tess013_15.00_1 APASS	LC	2M	
Datalink	Tess013	0	15	112.3292	-69.3659	Tess013_15.00_1 APASS	LC	2M	
Datalink	Tess013	0	15	113.3153	-70.847	Tess013_15.00_1 APASS	LC	2M	
Datalink	Tess013	0	15	113.6969	-69.1483	Tess013_15.00_1 APASS	LC	2M	

vizier_votable(34).vot

CDS/P/DSS2/color

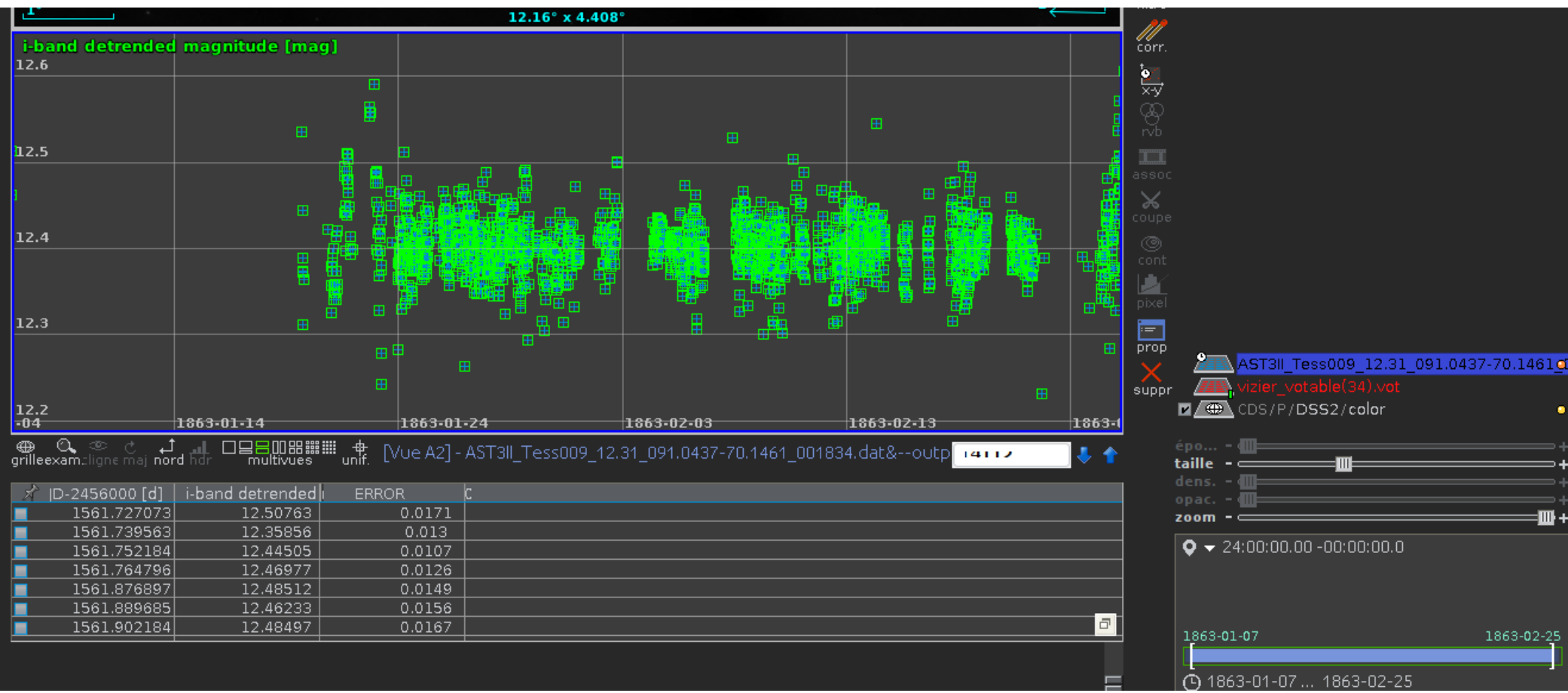
epo... - taille - dens. - opac. - zoom - 06:47:42.36 -71:53:22.7

Aucun filtre tenu 12.16° x 8.831°

Access points



Or I can use Aladin:



What's next



Basic data :

V* RT And -- RS CVn Variable

Other object types: ?

ICRS coord. ($ep=J2000$) :

EKA coord. ($ep=B1950.0+1950$) :

* (BD,AG,...), SB* (CABS,CCABS,...), V* (AN,V*), RS* (2009yC

23 11 10.0984058784 +53 01 33.031339248 (Optical) [0.0122

23 08 55.4655244640 +52 45 15.816412570 [0.0122 0.0124 90]

108.0575944385323 -06.9255900766492 [0.0122 0.0124 90]

-7.605 -21.777 [0.016 0.015 90] A 2020yCat.1350...0G

: V(km/s) 0.60 [0.6] / z(-) 0.000002 [0.000002] / cz 0.60 [0.6]
A 2004MNRAS.349.1069K

10.1029 [0.0176] A 2020yCat.1350...0G

F8V+G0-K1-3V C 2005RoAJ...15S.163P

B 9.58 [0.02] D 2000A&A...355L..27H

V 9.043 [0.017] D 2000A&A...355L..27H

R 8.73 [0.06] E 2009yCat.1315...0Z

G 8.866708 [0.004517] C 2020yCat.1350...0G

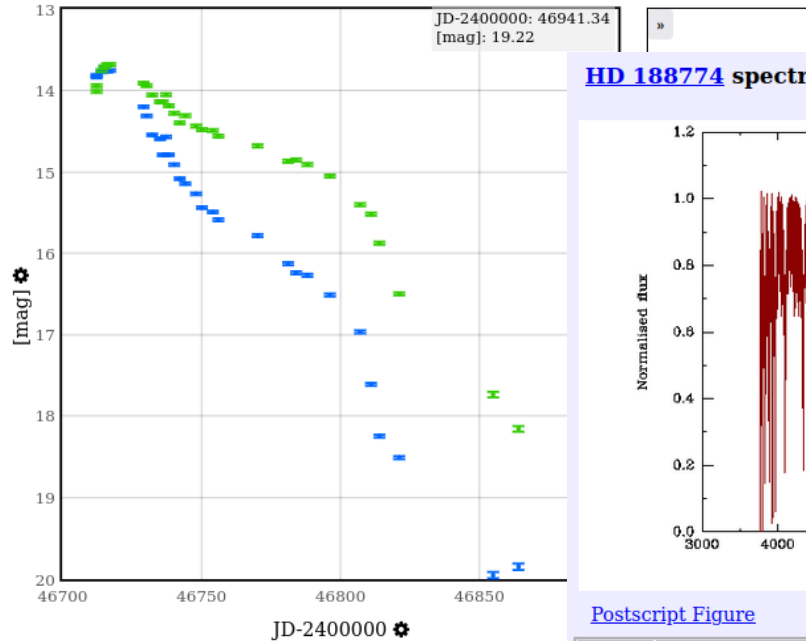
J 8.037 [0.018] C 2003yCat.2246...0C

H 7.780 [0.020] C 2003yCat.2246...0C

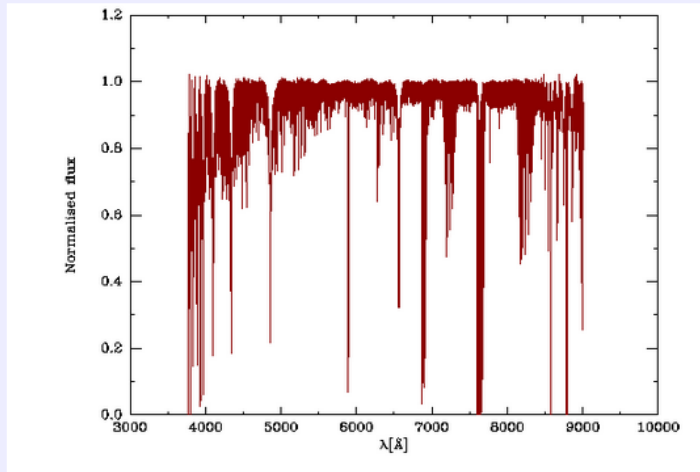
K 7.687 [0.020] C 2003yCat.2246...0C

J/AJ/151/33 Light curves of SN 1986L

[settings](#) [share](#)



HD 188774 spectrum on 2010-06-05



[Postscript Figure](#)

[Data as a Table](#)

Adapt Plot	x cuts:			xlog ☐	Bitmap size: 600x400
	y cuts:			ylog ☐	Adapt the plot

□ What's next



[J/ApJ/756/L33/table1](#)
[Post annotation](#)

[Radial velocities of 2 hot Jupiters in Praesepe \(Quinn+, 2012\)](#)
Target list and observation summary (53 rows)



[start AladinLite](#)

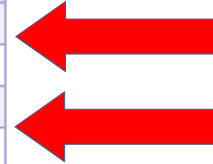


[plot the output](#)



[query using TAP/SQL](#)

Full	Name	RAJ2000 "h:m:s"	DEJ2000 "d:m:s"	Vmag mag	Nv	rms m/s	Per d	e d	VP
37	Pr0201	08 41 43.8	+20 13 36.6	10.52	33	47.7	4.4264	0.0070	VP
42	Pr0211	08 42 11.5	+19 16 37.2	12.06	18	227.8	2.1451	0.0012	VP
50	Pr0266	08 46 47.3	+19 38 40.8	10.94	5	40.0			VP
49	Pr0259	08 45 27.9	+21 39 12.8	10.60	6	44.3			VP
48	Pr0255	08 45 18.0	+18 52 24.7	9.66	5	22.5			VP



Handle empty data

Infrared spectroscopy of symbiotic stars. XI. : J/AJ/153/35

Access to



FTP

ReadMe



Download notebook



Authors : Fekel F.C. , Hinkle K.H., Joyce R.R. et.al

VizieR DOI : <https://doi.org/10.26093/cds/vizieR.51530035> Cite

Bibcode : 2017AJ....153...35F (ADS) (Simbad) (Objects)

Article Origin

Description

See

Infrared spectroscopy of symbiotic stars. XI. C

Go to the original article (<https://doi.org/10.3847/1538-3837/153/3/35>)

Add Datalink usage
example