astroquery_testing

March 21, 2016

```
In [1]: from astroquery.nist import Nist
        from astropy import units as u

In [2]: Nist.query?

In [3]: rslt = Nist.query(6560*u.AA, 6570*u.AA)

In [4]: rslt

Out[4]: <Table masked=True length=15>
          Observed      Ritz       Rel.      Aki      ... Type   TP     Line
          float64     float64     int64    float64    ... str2  str5    str8
        ----------- ----------- ------ ---------- ... ---- ----- --------
        6564.522552 6564.522555     -- 53877000.0 ...   -- T8637    L2752
                 -- 6564.527        --         -- ...   --    --      c67
                 -- 6564.535        --         -- ...   --    --      c68
        6564.537684 6564.537684     -- 22448000.0 ...   -- T8637 L6891c38
                 -- 6564.564672     --  2104600.0 ...   -- T8637       --
                 -- 6564.579878     --         -- ...   M1    --       --
                 -- 6564.583        --         -- ...   --    --      c66
        6564.584404 6564.584403     -- 22449000.0 ...   -- T8637 L6891c38
             6564.6 6564.632   500000 44101000.0 ...   -- T8637 L7400c29
                 -- 6564.608        --         -- ...   --    --      c69
         6564.66464 6564.66466      -- 64651000.0 ...   -- T8637    L2752
                 -- 6564.6662       --         -- ...   --    --      c71
                 -- 6564.667        --         -- ...   --    --      c70
                 -- 6564.680232     -- 10775000.0 ...   -- T8637       --
                 -- 6564.722349     --  4209700.0 ...   -- T8637       --

In [2]: import requests

In [24]: rslt = requests.post('http://physics.nist.gov/cgi-bin/ASD/ie.pl', params={'spectra':'Fe', 'for

In [25]: rslt.raise_for_status()

In [1]: from bs4 import BeautifulSoup

In [10]: bs = BeautifulSoup(rslt.content, "html5lib")

In [12]: import pandas as pd

In [16]: test2 = pd.read_html(rslt.text)

In [17]: len(test2)

Out[17]: 2
```

```
In [20]: test2[1]

Out[20]:                                    0
            0    Ionization Energy a (cm-1)

In [28]: from astroquery.eso import Eso

In [29]: rslt = Eso.query_instrument('naco', target='Sgr A*')

In [30]: instrument_form = requests.get('http://archive.eso.org/wdb/wdb/eso/naco/form')

In [36]: inst_response = Eso._activate_form(instrument_form, form_index=0, inputs={'target':'sgr a*', '

In [3]: rslt = requests.post('http://simbad.u-strasbg.fr/simbad/sim-id', params={'Ident':'sgr a*'})

In [4]: print(rslt.text)

<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<HTML>
<head>
<meta http-equiv="X-UA-Compatible" content="IE=edge" />
<link href="http://cds.u-strasbg.fr/cds-navbar-resources/css/cdshead.min.css" rel="stylesheet" />
<script type="text/javascript" src="http://cds.u-strasbg.fr/cds-navbar-resources/js/jquery-1.10.1.min.j
<script type="text/javascript">var jqMenu = jQuery.noConflict();</script>
<script type="text/javascript" src="http://cds.u-strasbg.fr/cds-navbar-resources/js/cdsmenu.min.js"></sc
<link rel="stylesheet" href="http://simbad.u-strasbg.fr/Simlib/sed.css" type="text/css" />
<link rel="stylesheet" href="http://simbad.u-strasbg.fr/Simlib/tables.css" type="text/css" />
<link rel="stylesheet" href="http://simbad.u-strasbg.fr/Simlib/myAladinLite.css" type="text/css" />
<link rel="search" type="application/opensearchdescription+xml" title="SIMBAD basic" href="http://simbad
<script src="/Simlib/jquery.min.js" type="text/javascript"></script>
<script src="/Simlib/myAladinLite.js" type="text/javascript"></script>
<script src="/Simlib/jquery.dataTables.min.js" type="text/javascript"></script>
<script src="/Simlib/simbad.js" type="text/javascript"></script>
<script src="/Simlib/tables.js" type="text/javascript"></script>
<script src="/Simlib/jquery-ui.js" type="text/javascript"></script>
<script src="/samp/simbad-samp.js" type="text/javascript"></script>
<link rel="stylesheet" href="http://simbad.u-strasbg.fr/css/simbad.css"  type="text/css" />
<link rel="stylesheet" href="/Simlib/jquery.dataTables.min.css"  type="text/css" />
<link rel="stylesheet" href="/htree/css/style.css" type="text/css" />
<script src="/htree/js/CanvasSVG.js"></script>
<script src="/htree/js/Circle.js"></script>
<script src="/htree/js/script.js"></script>
<TITLE>sgr a*</TITLE></head>
<body>
<div class="navbar navbar-top">
<div class="navbar-inner simbad">
<div class="container-fluid minwidth920">
<a class="brand" title="CDS home" href="http://cds.u-strasbg.fr/"><img src="http://cds.u-strasbg.fr/cds-
<div class="nav-collapse">
<ul class="nav">
<li id="portalNavbarItem"><a href="http://cdsportal.u-strasbg.fr">Portal</a></li>
<li id="simbadNavbarItem"><a href="http://simbad.u-strasbg.fr/simbad">Simbad</a></li>
<li id="vizierNavbarItem"><a href="http://vizier.u-strasbg.fr/viz-bin/VizieR">VizieR</a></li>
<li id="aladinNavbarItem"><a href="http://aladin.u-strasbg.fr/aladin.gml">Aladin</a></li>
<li id="xmatchNavbarItem"><a href="http://cdsxmatch.u-strasbg.fr">X-Match</a></li>
```

```html
<li class="dropdown">
<a href="#" class="dropdown-toggle" data-toggle="dropdown">Other<b class="caret"></b></a>
<ul class="dropdown-menu">
<li><a href="http://cds.u-strasbg.fr/cgi-bin/Sesame">Sesame name resolver</a></li>
<li><a href="http://cdsarc.u-strasbg.fr/viz-bin/Cat">Catalogue collection</a></li>
<li><a href='http://tapvizier.u-strasbg.fr/adql/' alt='TAP VizieR'>TAP VizieR</a></li>
<li><a href="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad">Dictionary of nomenclature</a></li>
<li><a href="http://cdsweb.u-strasbg.fr/SimPlay">SimPlay</a></li>
<li><a href="http://cdsbib.u-strasbg.fr/cgi-bin/cdsbib">Bibliography</a></li>
<li class="divider"></li>
<li><a href="mailto:cds-question@unistra.fr">Contact us</a></li>
</ul>
</li>
<li class="divider"></li>
<li><a href="http://cdsweb.u-strasbg.fr/help">Help</a></li>
</ul>
<div class="nav pull-right serviceLogo simbad">
</div>
</div><!--/.nav-collapse -->
</div>
</div>
</div>
<script type="text/javascript">setMenuItem("simbad");</script>
<div class="cdsPageTitle"><h1>sgr a*</h1></div><div style="margin: 10px"> <TABLE CELLPADDING="6">
  <TR ALIGN="LEFT" VALIGN="TOP" id="menu">
   <TD>
    <B>
     <I>
other query<br>modes :       </I>
    </B>
   </TD>
   <TD ALIGN="CENTER" BGCOLOR="#CCCCFF" id="nav-1">
    <A title="Query by object names, catalogue names, wildcards" HREF="sim-fid">
     <FONT SIZE="+0" COLOR="#000000">
Identifier<br>query     </FONT>
    </A>
   </TD>
   <TD ALIGN="CENTER" BGCOLOR="#CCCCFF" id="nav-2">
    <A title="Query by position with radius, epoch, equinox" HREF="sim-fcoo">
     <FONT SIZE="+0" COLOR="#000000">
Coordinate<br>query     </FONT>
    </A>
   </TD>
   <TD ALIGN="CENTER" BGCOLOR="#CCCCFF" id="nav-3">
    <A title="Query by filters on magnitude, velocity ..." HREF="sim-fsam">
     <FONT SIZE="+0" COLOR="#000000">
Criteria<br>query     </FONT>
    </A>
   </TD>
   <TD ALIGN="CENTER" BGCOLOR="#CCCCFF" id="nav-5">
    <A title="Query by publication, year, journal ..." HREF="sim-fref">
     <FONT SIZE="+0" COLOR="#000000">
Reference<br>query     </FONT>
    </A>
```

```
    </TD>
    <TD ALIGN="CENTER" BGCOLOR="#CCCCFF" id="nav-6">
     <A title="Simple query identifiers/coordinates" HREF="sim-fbasic">
      <FONT SIZE="+0" COLOR="#000000">
Basic<br>query     </FONT>
     </A>
    </TD>
    <TD ALIGN="CENTER" BGCOLOR="#CCCCFF" id="nav-4">
     <A title="Submit a list of queries, and customize the output" HREF="sim-fscript">
      <FONT SIZE="+0" COLOR="#000000">
Script<br>submission     </FONT>
     </A>
    </TD>
    <TD ALIGN="CENTER" BGCOLOR="#CCCCFF" id="nav-7">
     <A title="SQL like query editor" HREF="sim-tap">
      <FONT SIZE="+0" COLOR="#000000">
TAP     </FONT>
     </A>
    </TD>
    <TD ALIGN="CENTER"/>
    <TD ALIGN="CENTER" BGCOLOR="#FFFF99" id="nav-7">
     <A title="Select the displayed data" HREF="sim-fout" target="_blank">
      <FONT SIZE="+0" COLOR="#000000">
Output<br>options     </FONT>
     </A>
    </TD>
    <TD ALIGN="RIGHT" BGCOLOR="#CCFFCC">
     <FONT SIZE="+0" COLOR="#000000">
<A HREF="http://simbad.u-strasbg.fr/simbad/sim-help?Page=sim-id">Help</A>     </FONT>
    </TD>
   </TR>
 </TABLE>
<P><P> <TABLE WIDTH="100%" CELLPADDING="3">
  <TR>
    <TD>
     <FONT SIZE="+1">
Query : sgr a*     </FONT>
    </TD>
    <TD ALIGN="RIGHT" VALIGN="TOP" WIDTH="40%">
C.D.S.  -  SIMBAD4 rel 1.5  -  2016.03.14CET17:28:37
    </TD>
   </TR>
 </TABLE>
<BR><P> <B>
  <I>
Available data :
  </I>
 </B>
 <A HREF="#lab_basic">
Basic data </A>
 &bull;  <A HREF="#lab_ident">
Identifiers </A>
 &bull;  <A HREF="#lab_plot">
Plot &amp; images </A>
```

```
 &bull;  <A HREF="#lab_bib">
Bibliography </A>
 &bull;  <A HREF="#lab_meas">
Measurements </A>
 &bull;  <A HREF="#lab_arch">
External archives </A>
 &bull;  <A HREF="#lab_notes">
Notes </A>
 &bull;  <A HREF="#lab_annotations">
Annotations </A>
<HR><P><A NAME="lab_basic"></A>
 <script language="JavaScript" type="text/javascript" src="/Simlib/viz2.js"> </script>
 <TABLE WIDTH="100%" CELLSPACING="2">
  <TR>
   <TD>
    <FONT SIZE="+1">
     <B>
Basic data :
     </B>
    </FONT>
   </TD>
   <TD ALIGN="RIGHT" VALIGN="MIDDLE">
    <INPUT TYPE="image" NAME="sendBySAMP" ID="sendBySAMP" VALUE="sendBySAMP" SRC="http://simbad.u-strasb
   </TD>
  </TR>
  <TR>
<P>   <TD VALIGN="TOP" id="basic_data" style="min-width: 830px;">
    <TABLE>
     <TR>
      <TD NOWRAP colspan="2">
       <FONT SIZE="+2">
        <B>
NAME Sgr A*
       </B>
 --
X-ray source
      </FONT>
     </TD>
    </TR>
    <TR>
     <TD ALIGN="LEFT" VALIGN="TOP" NOWRAP>
      <SPAN class="info-tooltip">
       <DIV>
<FONT SIZE='-1'>
Origin of the objects types :

<P>
(Ref) Object type as listed in the reference "Ref"<BR>
(acronym) Object type linked to the acronym according to the original reference<BR>
() Anterior to 2007, before we can link the objet type to a reference, or given by the CDS team in some
</FONT>
       </DIV>
Other object types:
      </SPAN>
```

```
        </TD>
        <TD>
         <B>
          <TT>
Rad
          </TT>
         </B>
<TT title="">()</TT>,
        <B>
          <TT>
gam
          </TT>
         </B>
<TT title="">()</TT>,
        <B>
          <TT>
X
          </TT>
         </B>
<TT title="SWIFT,AX,CXOGC,[BGM2005],[SKM2002]">(SWIFT,AX,...)</TT>        </TD>
      </TR>
      <TR>
       <TD NOWRAP>
        <SPAN class="info-tooltip">
         <DIV>
<FONT SIZE='-1'>
Syntax of coordinates is : "ra dec (wtype) [error ellipse] quality bibcode" :
<UL>
<LI><EM>ra dec</EM> : right ascension and declination (unit and frame defined according to your Output
Grey values are increasing the original precision due to the computation of frame transformations
<LI><EM>(wtype)</EM> : wavelength class for the origin of the coordinates (Rad, mm, IR, Optical, UV, Xra
<LI><EM>[error ellipse]</EM> : coordinates error major axis, minor axis (in mas at epoch defined in you
position angle (in degrees North to East of the specified coordinate frame)
<LI><EM>quality</EM> : flag of quality
<UL>
<LI>E &gt;= 10"
<LI>D : 1-10" (and some old data)
<LI>C : 0.1-1"
<LI>B : 0.01-0.1" + 2MASS, Tyc
<LI>A : VLBI, Hipparcos
</UL>
<LI><EM>bibcode</EM> : bibcode of the coordinates reference
</UL>

</FONT>
         </DIV>
         <B>
ICRS
         </B>
 coord.
         <I>
(ep=J2000) :
         </I>
        </SPAN>
```

```
        </TD>
        <TD>
         <B>
          <TT>
17 45 40.03599 -29 00 28.1699

          <SPAN title="wavelength class for the origin of the measure">
(Radio)
          </SPAN>
          <SPAN title="error ellipse">
[
2.65 1.42 0
]
          </SPAN>
          <SPAN title="quality flag (A->E)">
B

          </SPAN>
          <SPAN class="bibcode">
<A HREF="http://simbad.u-strasbg.fr/simbad/sim-ref?bibcode=2011AJ...142...35P">2011AJ...142...35P</A>
          </TT>
         </B>
        </TD>
       </TR>
       <TR>
        <TD NOWRAP>
         <SPAN class="info-tooltip">
          <DIV>
<FONT SIZE='-1'>
Syntax of coordinates is : "ra dec (wtype) [error ellipse] quality bibcode" :
<UL>
<LI><EM>ra dec</EM> : right ascension and declination (unit and frame defined according to your Output
Grey values are increasing the original precision due to the computation of frame transformations
<LI><EM>(wtype)</EM> : wavelength class for the origin of the coordinates (Rad, mm, IR, Optical, UV, Xra
<LI><EM>[error ellipse]</EM> : coordinates error major axis, minor axis (in mas at epoch defined in you
position angle (in degrees North to East of the specified coordinate frame)
<LI><EM>quality</EM> : flag of quality
<UL>
<LI>E &gt;= 10"
<LI>D : 1-10" (and some old data)
<LI>C : 0.1-1"
<LI>B : 0.01-0.1" + 2MASS, Tyc
<LI>A : VLBI, Hipparcos
</UL>
<LI><EM>bibcode</EM> : bibcode of the coordinates reference
</UL>

</FONT>
          </DIV>
          <B>
FK5
          </B>
 coord.
          <I>
```

```
(ep=J2000 eq=2000) :
        </I>
       </SPAN>
      </TD>
      <TD>
       <TT>
17 45 40.036 -29 00 28.17

        <SPAN title="error ellipse">
[
2.65 1.42 0
]
       </SPAN>
      </TT>
     </TD>
    </TR>
    <TR>
     <TD NOWRAP>
      <SPAN class="info-tooltip">
       <DIV>
<FONT SIZE='-1'>
Syntax of coordinates is : "ra dec (wtype) [error ellipse] quality bibcode" :
<UL>
<LI><EM>ra dec</EM> : right ascension and declination (unit and frame defined according to your Output
Grey values are increasing the original precision due to the computation of frame transformations
<LI><EM>(wtype)</EM> : wavelength class for the origin of the coordinates (Rad, mm, IR, Optical, UV, Xra
<LI><EM>[error ellipse]</EM> : coordinates error major axis, minor axis (in mas at epoch defined in your
position angle (in degrees North to East of the specified coordinate frame)
<LI><EM>quality</EM> : flag of quality
<UL>
<LI>E &gt;= 10"
<LI>D : 1-10" (and some old data)
<LI>C : 0.1-1"
<LI>B : 0.01-0.1" + 2MASS, Tyc
<LI>A : VLBI, Hipparcos
</UL>
<LI><EM>bibcode</EM> : bibcode of the coordinates reference
</UL>

</FONT>
       </DIV>
       <B>
FK4
       </B>
 coord.
       <I>
(ep=B1950 eq=1950) :
        </I>
       </SPAN>
      </TD>
      <TD>
       <TT>
17 42 29.30 -28 59 18.6
```

```
        <SPAN title="error ellipse">
[
2.65 1.42 0
]
        </SPAN>
      </TT>
     </TD>
    </TR>
    <TR>
     <TD NOWRAP>
      <SPAN class="info-tooltip">
       <DIV>
<FONT SIZE='-1'>
Syntax of coordinates is : "ra dec (wtype) [error ellipse] quality bibcode" :
<UL>
<LI><EM>ra dec</EM> : right ascension and declination (unit and frame defined according to your Output
Grey values are increasing the original precision due to the computation of frame transformations
<LI><EM>(wtype)</EM> : wavelength class for the origin of the coordinates (Rad, mm, IR, Optical, UV, Xra
<LI><EM>[error ellipse]</EM> : coordinates error major axis, minor axis (in mas at epoch defined in your
position angle (in degrees North to East of the specified coordinate frame)
<LI><EM>quality</EM> : flag of quality
<UL>
<LI>E &gt;= 10"
<LI>D : 1-10" (and some old data)
<LI>C : 0.1-1"
<LI>B : 0.01-0.1" + 2MASS, Tyc
<LI>A : VLBI, Hipparcos
</UL>
<LI><EM>bibcode</EM> : bibcode of the coordinates reference
</UL>

</FONT>
       </DIV>
       <B>
Gal
       </B>
 coord.
       <I>
(ep=J2000) :
       </I>
      </SPAN>
     </TD>
     <TD>
      <TT>
359.9442 -00.0462

        <SPAN title="error ellipse">
[
2.65 1.42 0
]
        </SPAN>
      </TT>
     </TD>
    </TR>
```

```
          </TABLE>
        </TD>
       <TD VALIGN="TOP" WIDTH="350">
        <TABLE cellpadding="10px">
         <TR>
          <TD>
           <FORM ACTION="sim-coo" METHOD="GET" target="_blank">
SIMBAD
            <INPUT TYPE="hidden" NAME="Coord" ID="Coord" VALUE="17 45 40.03599-29 00 28.1699" />
            <INPUT TYPE="hidden" NAME="CooFrame" ID="CooFrame" VALUE="ICRS" />
            <INPUT TYPE="hidden" NAME="CooEqui" ID="CooEqui" VALUE="2000.0" />
            <INPUT TYPE="hidden" NAME="CooEpoch" ID="CooEpoch" VALUE="J2000" />
            <INPUT TYPE="hidden" NAME="Radius.unit" ID="Radius.unit" VALUE="arcmin" />
            <INPUT TYPE="submit" NAME="submit" VALUE="query around" />
 with radius
            <INPUT TYPE="text" NAME="Radius" SIZE="3" MAXLENGTH="3" VALUE="2" />
 arcmin
          </FORM>
         </TD>
        </TR>
        <TR>
         <TD ALIGN="CENTER" VALIGN="TOP">
          <DIV class="Rounded">
Interactive <a href="http://aladin.u-strasbg.fr/AladinLite/?target=NAME%20Sgr%20A*&fov=0.033334&survey=
<img id="back-icon" src="http://simbad.u-strasbg.fr/aladinlite_back_icon.png"  width=20 height=20 onclic
          <LABEL FOR="2MASS">
2MASS
          </LABEL>
          <INPUT NAME="surveysButtons" ID="DSS" TYPE="radio" />
          <LABEL FOR="DSS">
DSS
          </LABEL>
          <INPUT NAME="surveysButtons" ID="others" TYPE="radio" />
<select id="surveysList" ><option>SDSS</option><option>XMM</option><option>IRAC</option><option>IRIS</op
          <noscript>
not available (enable JS to use it)
           <IMG SRC="http://alasky.u-strasbg.fr/cgi/simbad-thumbnails/get-thumbnail.py?oid=NAME%20Sgr%20A*
          </noscript>
<script type="text/javascript">$(document).ready(function(){myAladinLite("P/DSS2/color","NAME Sgr A*",0
       </TD>
      </TR>
      <TR>
       <TD>
        <script language="JavaScript" type="text/javascript" src="http://simbad.u-strasbg.fr/js/sed.js">
         <FORM ACTION="http://vizier.u-strasbg.fr/vizier/sed/" METHOD="GET" class="Rounded" id="FormSED"
          <IMG SRC="http://simbad.u-strasbg.fr/icons/sed-icon.png" ALT="sedIcon" ID="sedIcon" ALIGN="LEFT
          <DIV ALIGN="CENTER">
VizieR
          <A HREF="http://vizier.u-strasbg.fr/vizier/sed/doc/">
photometry viewer          </A>
  
          <IMG SRC="http://simbad.u-strasbg.fr/icons/help.png" ALT="sed-help-icon" ID="sed-help-icon" AL
<BR>         <INPUT TYPE="submit" NAME="submitSimbad" VALUE="Search" />
within radius
```

```
            <INPUT TYPE="hidden" NAME="-c" ID="-c" VALUE="17 45 40.03599-29 00 28.1699" />
            <INPUT TYPE="number" NAME="-c.r" required="true" min="1" max="30" pattern="[0-9]{1,2}\.?[0-9]*'
 arcsec
            <INPUT TYPE="hidden" NAME="-c.u" ID="-c.u" VALUE="arcsec" />
            <INPUT TYPE="hidden" NAME="show_settings" ID="show_settings" VALUE="1" />
            <SPAN ID="sed-help-text" class="tooltip">
<FONT SIZE='-1'> The <B>VizieR photometry tool</B> allows for easy visualization of photometry <B>point
          </DIV>
         </FORM>
        </TD>
       </TR>
      </TABLE>
     </TD>
    </TR>
    <TR>
     <TABLE>
      <TR>
       <TD VALIGN="TOP">
        <SPAN class="info-tooltip">
         <DIV>
<FONT SIZE='-1'>
Some important notes on this object about identifications and objects associations.
</FONT>
         </DIV>
notes:         </SPAN>
<P>       </TD>
       <TD VALIGN="TOP">
        <UL>
         <LI>
<!-- Input on stdin (cgiprint-9.09) -->
has an IR counterpart labeled SgrA* IR in <A HREF="http://cdsbib.u-strasbg.fr/cgi-bin/cdsbib?2004ApJ...
         </LI>
         <LI>
<!-- Input on stdin (cgiprint-9.09) -->
see also <A HREF="http://simbad.u-strasbg.fr/simbad/sim-id?Ident=NAME%20SGR%20A%2A%20Cluster">NAME SGR A
         </LI>
         <LI>
<!-- Input on stdin (cgiprint-9.09) -->
detection of two flaring sources on 2004 March 31: <A HREF="http://simbad.u-strasbg.fr/simbad/sim-id?Id
         </LI>
        </UL>
       </TD>
      </TR>
     </TABLE>
<P>   </TR>
 </TABLE>
<HR><P> <TABLE>
  <TR>
   <TD ALIGN="LEFT" VALIGN="TOP" NOWRAP style="min-width: 800px;">
    <FONT SIZE="+1">
     <B>
Hierarchy :
     </B>
number of linked objects
```

```
<BR>     <I>
whatever the membership probability is
     </I>
     <I>
(see description
     </I>
<A HREF="http://simbad.u-strasbg.fr/simbad/../Pages/data_hierarchy.htx">here</A>     <I
)
     </I>
     <B>
 :
     </B>
    </FONT>
<P>     <FORM ACTION="sim-id" METHOD="GET" target="_blank">
     <INPUT TYPE="hidden" NAME="Ident" ID="Ident" VALUE="SWIFT J1746.3-2850A" />
     <INPUT TYPE="hidden" NAME="NbIdent" ID="NbIdent" VALUE="query_hlinks" />
     <INPUT TYPE="hidden" NAME="Coord" ID="Coord" VALUE="17 45 40.03599-29 00 28.1699" />
     <TABLE CELLPADDING="12">
      <TD VALIGN="MIDDLE" WIDTH="12%">
       <INPUT TYPE="hidden" NAME="parents" ID="parents" VALUE="1" />
       <INPUT TYPE="submit" NAME="submit" VALUE="parents" />
 :
1
     </TD>
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     <TD VALIGN="MIDDLE" WIDTH="12%"/>
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Display criteria :
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       <OPTION VALUE="h_all">
All       </OPTION>
       <OPTION VALUE="h_90">
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stars       </OPTION>
       <OPTION VALUE="h_galaxies">
galaxies       </OPTION>
       <OPTION VALUE="h_radio">
radio       </OPTION>
       <OPTION VALUE="h_IR">
IR       </OPTION>
       <OPTION VALUE="h_around">
&lt;2 arcsec       </OPTION>
       <OPTION VALUE="h_numref">
#ref>50       </OPTION>
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  <TR>
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<FONT SIZE='-1'>
The link on the acronym of the identifiers give access to the
information for this acronym in the dictionary of nomenclature.
</FONT>
     </DIV>
     <FONT SIZE="+1">
      <B>
Identifiers (13) :
      </B>
     </FONT>
    </SPAN>
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  </TR>
 </TABLE>
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  <TR>
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    <B>
     <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?SWIFT">SWIFT</A> J1746.3-2850A
     </TT>
    </B>
   </TD>
   <TD>
    <B>
     <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?NAME%20SGR%20A">NAME</A> SGR A *
     </TT>
    </B>
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   <TD>
    <B>
     <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?NAME%20SGR">NAME</A> SGR A
     </TT>
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   <TD>
    <B>
     <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?%5bSKM2002%5d">[SKM2002]</A> 28
     </TT>
    </B>
   </TD>
  </TR>
  <TR>
   <TD>
    <B>
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```
      <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?AX">AX</A> J1745.6-2900
      </TT>
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      <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?NAME">NAME</A> SgrA*/IR
      </TT>
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     <B>
      <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?NAME%20SAGITTARIUS">NAME</A> SAGITTARIUS A
      </TT>
     </B>
    </TD>
    <TD/>
   </TR>
   <TR>
    <TD>
     <B>
      <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?CXOGC">CXOGC</A> J174540.0-290027
      </TT>
     </B>
    </TD>
    <TD>
     <B>
      <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?NAME%20Sgr">NAME</A> Sgr A*/L'
      </TT>
     </B>
    </TD>
    <TD>
     <B>
      <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?%5bBGM2005%5d">[BGM2005]</A> J174540.14-290028.40
      </TT>
     </B>
    </TD>
    <TD/>
   </TR>
   <TR>
    <TD>
     <B>
      <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?NAME%20Sgr">NAME</A> Sgr A*
      </TT>
     </B>
    </TD>
    <TD>
```

```
      <B>
       <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?NAME%20Sgr%20A*">NAME</A> Sgr A* IR
       </TT>
      </B>
     </TD>
     <TD>
      <B>
       <TT>
<A HREF="http://cds.u-strasbg.fr/cgi-bin/Dic-Simbad?%5bBGM2005%5d">[BGM2005]</A> J174540.08-290028.48
       </TT>
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  <TR VALIGN="TOP">
   <TD WIDTH="12%">
    <FONT SIZE="+1">
     <B>
Plots and Images
     </B>
    </FONT>
   </TD>
   <TD ALIGN="CENTER" VALIGN="TOP" WIDTH="7%">
    <FORM ACTION="sim-plot" METHOD="GET" target="_blank">
     <INPUT TYPE="hidden" NAME="ident" ID="ident" VALUE="NAME Sgr A*" />
     <INPUT TYPE="hidden" NAME="coo" ID="coo" VALUE="17 45 40.03599-29 00 28.1699" />
     <INPUT TYPE="hidden" NAME="radius.unit" ID="radius.unit" VALUE="arcmin" />
     <INPUT TYPE="image" VALUE="plot around" SRC="http://simbad.u-strasbg.fr/icons/plot-icon.png" BORDE
<BR>     <B>
plot
     </B>
<P>radius
     <INPUT TYPE="text" NAME="radius" SIZE="8" MAXLENGTH="8" VALUE="10" />
 arcmin
    </FORM>
   </TD>
   <TD ALIGN="CENTER" VALIGN="TOP" WIDTH="7%">
    <A HREF="http://cdsportal.u-strasbg.fr/#NAME%20Sgr%20A*" TARGET="_blank">
     <IMG SRC="http://simbad.u-strasbg.fr/icons/portal-icon.png" BORDER="0" />
    </A>
<BR>     <B>
CDS portal
    </B>
   </TD>
   <TD ALIGN="CENTER" VALIGN="TOP" WIDTH="7%">
    <A HREF="http://cdsweb.u-strasbg.fr/SimPlay/#target=NAME%20Sgr%20A*&lp=true&rp=true&bp=true" TARGET=
     <IMG SRC="http://simbad.u-strasbg.fr/icons/simplay-icon.png" BORDER="0" />
    </A>
<BR><B>CDS Simplay</B><br><I><FONT size='-1'>(requires flash)</FONT></I>   </TD>
   <TD ALIGN="CENTER" VALIGN="TOP" WIDTH="7%">
```

```
     <A HREF="http://aladin.u-strasbg.fr/java/nph-aladin.pl?script=get%20Aladin%20NAME%20Sgr%20A*%2011arc
      <IMG SRC="http://simbad.u-strasbg.fr/icons/aladin-icon.png" BORDER="0" />
     </A>
<BR>     <B>
Aladin applet
     </B>
    </TD>
   </TR>
 </TABLE>
<HR><P><A NAME="lab_bib"></A>
 <TABLE WIDTH="100%">
  <TR>
    <TD VALIGN="TOP">
     <FONT SIZE="+1">
      <B>
References (2494 between 1850 and 2016)
      </B>
     </FONT>
<BR>     <FONT SIZE="-1">
      <I>
Simbad bibliographic survey began in 1950 for stars (at least bright stars) and in 1983 for all other ol
      </I>
     </FONT>
<BR>     <A HREF="http://simbad.u-strasbg.fr/tools/SimWatch/manage" TARGET="_blank">
      <IMG SRC="http://simbad.u-strasbg.fr/icons/simWatch.png" BORDER="0" />
     </A>
     <A HREF="http://simbad.u-strasbg.fr/tools/SimWatch/manage/?add_object=NAME%20Sgr%20A*">
Follow     </A>
 new references on this object
    </TD>
    <TD VALIGN="TOP">
     <FORM ACTION="sim-id-refs" METHOD="GET" id="sim-id-refs" target="_blank">
      <INPUT TYPE="submit" NAME="submit" VALUE="sort references" />
      <INPUT TYPE="hidden" NAME="Ident" ID="Ident" VALUE="@2419046" />
      <INPUT TYPE="hidden" NAME="Name" ID="Name" VALUE="NAME Sgr A*" />
     </FORM>
     <FORM ACTION="sim-id#lab_bib" METHOD="GET">
      <INPUT TYPE="submit" NAME="submit" VALUE="display" />
      <SELECT NAME="bibdisplay">
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number of references        </OPTION>
       <OPTION VALUE="bibcode">
only bibcodes        </OPTION>
       <OPTION VALUE="refsum" SELECTED>
reference summary       </OPTION>
       <OPTION VALUE="bibnumauthors">
number of references by 1st author       </OPTION>
       <OPTION VALUE="bibnumyears">
number of references by year       </OPTION>
       <OPTION VALUE="bibnumjournals">
number of references by journal       </OPTION>
      </SELECT>
<P>from:
      <INPUT TYPE="text" NAME="bibyear1" SIZE="10" MAXLENGTH="12" VALUE="1850" />
```

```
  to:
      <INPUT TYPE="text" NAME="bibyear2" SIZE="10" MAXLENGTH="12" VALUE="$currentYear" />
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    </FORM>
   </TD>
  </TR>
 </TABLE>
 <FORM ACTION="sim-id#lab_bib" METHOD="GET" id="formSort" accept-charset="utf-8">
                &n
Sort
  </B>
 reference summaries by :
 (not exhaustive,
<A HREF="http://simbad.u-strasbg.fr/simbad/../Pages/data_bibobjinfo.htx">explanation here</A>)<P> &
  <INPUT TYPE="submit" NAME="submit" VALUE="Title|Abstract|Keyword" />
  <INPUT TYPE="submit" NAME="submit" VALUE="In table" />
  <INPUT TYPE="button" NAME="Score" onclick="$('#sim-id-refs input[type=\'submit\']').click();" VALUE="S
  <INPUT TYPE="hidden" NAME="Ident" ID="Ident" VALUE="@2419046" />
  <INPUT TYPE="hidden" NAME="Name" ID="Name" VALUE="NAME Sgr A*" />
  <INPUT TYPE="hidden" NAME="bibdisplay" ID="bibdisplay" VALUE="refsum" />
  <INPUT TYPE="hidden" NAME="bibyear1" ID="bibyear1" VALUE="1850" />
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<P> <script language="JavaScript" type="text/javascript">
$('#formSort input[type="submit"]').attr("disabled","disabled");
 </script>
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 <FONT SIZE="+1">
  <B>
Measurements (2 types) :
  </B>
 </FONT>
<P> <FORM ACTION="sim-id#lab_meas" METHOD="GET">
<BR>  <INPUT TYPE="checkbox" NAME="mescat.iso" />
  <B>
    <TT>
ISO
    </TT>
  </B>
:
  <B>
82
  </B>
    <INPUT TYPE="checkbox" NAME="mescat.xmm" />
  <B>
    <TT>
XMM
    </TT>
  </B>
:
  <B>
5
  </B>
```

```
  <P>  <INPUT TYPE="hidden" NAME="Ident" ID="Ident" VALUE="@2419046" />
   <INPUT TYPE="hidden" NAME="Name" ID="Name" VALUE="NAME Sgr A*" />
   <INPUT TYPE="submit" NAME="submit" VALUE="display selected measurements" />
   <INPUT TYPE="submit" NAME="submit" VALUE="display all measurements" />
   <INPUT TYPE="submit" NAME="submit" VALUE="clear" />
 </FORM>
<HR><P><P><A NAME="lab_arch"></A>
<A NAME="lab_external"></A>
 <FONT SIZE="+1">
   <B
External archives :
   </B>
 </FONT>
<P>Archive data at
<A HREF="http://simbad.u-strasbg.fr/simbad/../heasarc/W3Browse/w3basic.pl?Tables=%40All+Archives&Coordi
<A HREF="http://nedwww.ipac.caltech.edu/cgi-bin/nph-objsearch?objname=AX%20J1745.6-2900&extend=no&out_cs
<A HREF="http://vizier.u-strasbg.fr/">VizieR</A> :
<P><A HREF="http://vizier.u-strasbg.fr/viz-bin/VizieR-4?-c=266.41681662-29.00782497&-c.rs=5&-out.add=_r&
<HR><P><P><A NAME="lab_annotations"></A>
 <FONT SIZE="+1">
   <B
Annotations :
   </B>
 </FONT>
<BR> <FONT SIZE="+0">
   <I
Annotations allow a user to add a note or report an error concerning the astronomical object and its da
 </FONT>
<P>Currently no annotations available
<P><A HREF="http://cdsannotations.u-strasbg.fr/annotations/simbadObject/2419046/new">add an annotation
<div class="cdstail">
<hr class="simbad"/>
<div>
<div>2016.03.14-17:28:37</div>
<div>
<p>&copy; UDS/CNRS</p>
<p><a href="mailto:cds-question@unistra.fr?Subject=Simbad"><i class="icon-envelope"></i> Contact</a></p
</div>
</div>
</div><script type="text/javascript">var piwikSiteId="simbad";</script>
<script type="text/javascript" src="http://cdsannotations.u-strasbg.fr/piwikinit"></script>
<script type="text/javascript" src="http://cdsannotations.u-strasbg.fr/piwiktracker"></script></body>
</HTML>

In [8]: bs = BeautifulSoup(rslt.content, "html5lib")

In [9]: bs.findAll('td')


        ---------------------------------------------------------------------------

        AttributeError                            Traceback (most recent call last)

        <ipython-input-9-2a9594d92307> in <module>()
    ----> 1 bs.findAll('td')
```

```
/Users/adam/anaconda/envs/astropy35/lib/python3.5/site-packages/beautifulsoup4-4.4.1-py3.5.egg/
   1257          if not recursive:
   1258              generator = self.children
-> 1259          return self._find_all(name, attrs, text, limit, generator, **kwargs)
   1260     findAll = find_all       # BS3
   1261     findChildren = find_all  # BS2


/Users/adam/anaconda/envs/astropy35/lib/python3.5/site-packages/beautifulsoup4-4.4.1-py3.5.egg/
    527                          if isinstance(element, Tag)
    528                              and element.name == name)
--> 529               return ResultSet(strainer, result)
    530          results = ResultSet(strainer)
    531          while True:


/Users/adam/anaconda/envs/astropy35/lib/python3.5/site-packages/beautifulsoup4-4.4.1-py3.5.egg/
   1722     that created it."""
   1723     def __init__(self, source, result=()):
-> 1724         super(ResultSet, self).__init__(result)
   1725         self.source = source


/Users/adam/anaconda/envs/astropy35/lib/python3.5/site-packages/beautifulsoup4-4.4.1-py3.5.egg/
    524          elif isinstance(name, str):
    525              # Optimization to find all tags with a given name.
--> 526              result = (element for element in generator
    527                          if isinstance(element, Tag)
    528                              and element.name == name)


/Users/adam/anaconda/envs/astropy35/lib/python3.5/site-packages/beautifulsoup4-4.4.1-py3.5.egg/
   1275         while current is not stopNode:
   1276             yield current
-> 1277             current = current.next_element
   1278
   1279     # CSS selector code


AttributeError: 'NoneType' object has no attribute 'next_element'


In [ ]:
```